

Executive Abilities:
Measures and Instruments for
Neurobehavioral Evaluation and
Research (EXAMINER)

Testing Forms C

VERBAL FLUENCY: PHONEMIC

MATERIALS: *Timer - 1 minute*

[Examiner]: I'm going to say a letter of the alphabet. When I ask you to start, tell me as many words as you can that begin with that letter. You will have one minute before I tell you to stop. None of the words can be numbers or names of people, or places.

For example, if I gave you the letter *B*, you could say *brown*, *bottle* or *bake*, but you wouldn't say *Barbara*, *Boston* or *billion*. Also, don't give me the same word with different endings, so if you said *bake*, you wouldn't also say *baked* or *bakes*, and if you said *big*, you wouldn't also say *bigger* and *biggest*.

Let's begin. Tell me all the words you can, as quickly as you can, that begin with the letter 'R'. Ready? Begin.

ADMINISTRATION:

Start timer after completing instructions. Write actual responses as legibly as possible. Stop the procedure at 1 minute.

PROMPTS:

- If the participant pauses for 15 seconds:*
 - Keep going.
 - What other words beginning with 'R' can you think of?
- If participant gives 3 consecutive words that do not start with the designated letter: (Provide this prompt only once during this condition.)*
 - We are now using the letter 'R'.

Record responses:

1.	11.	21.	31.
2.	12.	22.	32.
3.	13.	23.	33.
4.	14.	24.	34.
5.	15.	25.	35.
6.	16.	26.	36.
7.	17.	27.	37.
8.	18.	28.	38.
9.	19.	29.	39.
10.	20.	30.	40.

Correct R-words: _____ / 40 R's Repetitions: _____ # R's Rule Violations: _____

VERBAL FLUENCY: PHONEMIC

MATERIALS: *Timer - 1 minute*

[Examiner]: Now I want you to do the same for another letter. The next letter is M. Ready? Begin.

ADMINISTRATION:

Start timer after completing instructions. Write actual responses as legibly as possible. Stop the procedure at 1 minute.

PROMPTS:

- If the participant pauses for 15 seconds:*
 - Keep going.
 - What other words beginning with 'M' can you think of?
- If participant gives 3 consecutive words that do not start with the designated letter:*
 - We are now using the letter 'M'.

Record responses:

1.	11.	21.	31.
2.	12.	22.	32.
3.	13.	23.	33.
4.	14.	24.	34.
5.	15.	25.	35.
6.	16.	26.	36.
7.	17.	27.	37.
8.	18.	28.	38.
9.	19.	29.	39.
10.	20.	30.	40.

Correct M-words: _____ / 40 M's Repetitions: _____ # M's Rule Violations: _____

CATEGORY FLUENCY: ANIMALS

MATERIALS: *Timer - 1 minute*

[Examiner]: Now I am going to give you a category, and I want you to name, as fast as you can, all of the things that belong to that category. For example, if I say 'Items of furniture', you would say 'chair', 'table', or 'desk'. It doesn't matter what letter the word starts with.

Now I want you to name things that belong to the category: **Animals**. You will have one minute. I want you to tell me all the animals that you can think of in one minute. Ready? Begin.

ADMINISTRATION:

Start timer after completing instructions. Write actual responses as legibly as possible. Stop the procedure at 1 minute.

Do not cue the participant about including more than mammals. However, if the participant inquires prior to initiating the response or asks during the test, the examiner is permitted to say "yes." It is also permissible to repeat the instruction or category if the participant specifically requests it.

PROMPTS:

- If the participant pauses for 15 seconds:*
 - **Keep going.**
 - **What other animals can you think of?**
- If participant gives 3 consecutive words that do not fit the category:*
 - **The category we are now using is animals.**

Record responses:

1.	11.	21.	31.
2.	12.	22.	32.
3.	13.	23.	33.
4.	14.	24.	34.
5.	15.	25.	35.
6.	16.	26.	36.
7.	17.	27.	37.
8.	18.	28.	38.
9.	19.	29.	39.
10.	20.	30.	40.

Correct Animals: _____ / 40 Animals Repetitions: _____ # Animal Rule Violations: _____

CATEGORY FLUENCY: ARTICLES OF CLOTHING

MATERIALS: *Timer - 1 minute*

[Examiner]: Now I want you to name things that belong to another category: Articles of Clothing. You will have one minute. I want you to tell me all the 'Articles of Clothing' you can think of in one minute. Ready? Begin.

ADMINISTRATION:

Start timer after completing instructions. Write actual responses as legibly as possible. Stop the procedure at 1 minute. It is also permissible to repeat the instruction or category if the participant specifically requests it.

PROMPTS:

- If the participant pauses for 15 seconds:*
 - Keep going.
 - What other articles of clothing can you think of?
- If participant gives 3 consecutive words that do not fit the category:*
 - The category we are now using is articles of clothing.

Record responses:

1.	11.	21.	31.
2.	12.	22.	32.
3.	13.	23.	33.
4.	14.	24.	34.
5.	15.	25.	35.
6.	16.	26.	36.
7.	17.	27.	37.
8.	18.	28.	38.
9.	19.	29.	39.
10.	20.	30.	40.

Correct Clothing: _____ / 40 Clothing Repetitions: _____ # Clothing Rule Violations: _____

INSIGHT

MATERIALS: *Normal Distribution Graph (Stimuli Packet)*

After completing Verbal Fluency:

[Examiner]: I would like to know how well you think you did on this task. So compared to other people your age and with a similar level of education, how do you think you did?

I would like you to show me where you would be on this graph. *Display Normal Distribution Graph.*

If we look at a group of 100 people, we see that very few do really poorly [*point to the low end of the graph*], and very few people do extremely well [*point to the high end of the graph*], and most people fall here in the middle around the 50th percentile [*point to the middle of the graph where the graph peaks*]. How do you think you did?

ADMINISTRATION:

Record response as a percentile between 1 and 100.

PROMPTS:

If participant points to graph but does not give a number:

- What number would that be?

Self-Appraisal for Verbal Fluency: _____

UNSTRUCTURED TASK

MATERIALS: *Timer – 6 minutes (to be displayed on computer), Practice Page (attached), 3 Stimulus Booklets (attached), Instruction Sheet (Stimulus Packet), Pen*

[Examiner]: On this practice page there are six puzzles for you to try. Each puzzle has a different instruction, and some puzzles are easier than others. Go ahead and complete this page so you can see the kinds of puzzles you will do.

Position Practice Page in front of participant. Have participant complete the page.

Here are 3 booklets. Each of the booklets has different puzzles you can do. In these booklets, there are four puzzles on each page. Each puzzle has a number of points that you will earn when you complete the puzzle. Some puzzles will have higher points than others. Your goal is to earn as many points as possible.

You do not have to complete all of the pages in a book, and you do not have to complete all the puzzles on each page. You can go in any order you want through the puzzles. Each book is worth the same amount of points. Be sure to read the instructions for each puzzle you do, and complete the puzzles accurately to receive full credit.

You will only have 6 minutes to earn as many points as possible, so choose your puzzles carefully. A timer will be displayed to help you manage your time. Here are the instructions to help you remember.

Display Computer Timer

ADMINISTRATION:

Position the 3 Stimulus Books in front of participant. Point to instructions if participant appears to have forgotten.

Start computer timer after completing instructions. Stop at 6 minutes.

Do NOT allow participant to complete any item in progress when the time limit is reached.

BOOK 1, PG1		PG2		PG3		PG4		PG5		PG6		
5	<u>75</u>	5	<u>20</u>	15	<u>10</u>	5	1	5	1	5	5	HVC _____ LVC _____
75	<u>20</u>	<u>75</u>	75	10	<u>50</u>	10	<u>10</u>	5	5	1	1	HVA _____ LVA _____
												TOTAL PTS. _____
Book 2												
<u>20</u>	10	<u>20</u>	75	<u>50</u>	1	1	<u>10</u>	5	5	5	1	HVC _____ LVC _____
<u>75</u>	75	5	<u>75</u>	10	<u>15</u>	5	10	5	1	1	5	HVA _____ LVA _____
												TOTAL PTS. _____
Book 3												
<u>25</u>	75	<u>75</u>	75	<u>10</u>	15	5	<u>10</u>	5	5	5	1	HVC _____ LVC _____
<u>75</u>	10	5	<u>25</u>	<u>50</u>	1	10	1	1	5	1	5	HVA _____ LVA _____
												TOTAL PTS. _____

ANSWER KEY:
Use the grid to the left to indicate which puzzles were attempted (A) or completed (C) as you go through the three books. The six bold boxes represent the pages in each of the books. High Value puzzles are in bold and underlined.

# of High Value Items completed: _____	# of Low Value Items completed: _____
# of High Value Items attempted: _____	# of Low Value Items attempted: _____
Total Points earned: _____	

FLANKER

MATERIALS & SET-UP: See Manual for instructions on installing computer tasks and information on set-up.

Use Left and Right arrow keys on the keyboard (no labels).

Read instructions out loud as they appear on each screen.

PRACTICE TRIAL:

[Examiner]: You will be shown a series of arrows on the screen, pointing to the left or to the right. For example:
Point to the central arrows on computer screen.

Press the RIGHT button if the CENTER arrow points to the right. Press the LEFT button if the CENTER arrow points to the left. *Point to left and right arrow keys as indicated.*

Try to respond as quickly and accurately as you can. Try to keep your attention focused on the cross (“+”) at the center of the screen.

Check that participant’s fingers are appropriately placed on Left and Right arrow keys. Encourage participant to keep fingers in place until task is complete.

First we’ll do a practice trial. Press the SPACEBAR to begin.

Run practice trial. Provide feedback as needed.

After practice is finished, go on to the test. Read instructions out loud as they appear on each screen.

TEST:

[Examiner]: Now we’ll move on to the task, the instructions are the same except you will no longer receive feedback after your responses.

Press the LEFT button if the CENTER arrow points to the left. Press the RIGHT button if the CENTER arrow points to the right.

Remember to keep your focus on the center cross (“+”) and try to respond as quickly as possible without making mistakes.

Press the SPACEBAR when you are ready to begin.

SET-SHIFTING TASK

Read instructions out loud as they appear on each screen.

PRACTICE TRIAL:

[Examiner]: This is a matching task.

You will see an object in the center of the screen, and a word at the bottom of the screen. The word will be SHAPE or COLOR. The word at the bottom of the screen will tell you how to match the object in the center to one of the objects in the corners.

When you have to match by COLOR, you should push the LEFT button for RED and the RIGHT button for BLUE. When you have to match by SHAPE, you should push the LEFT button for TRIANGLE and the RIGHT button for RECTANGLE.

Check that participant's fingers are appropriately placed on Left and Right arrow keys. Encourage participant to keep fingers in place until task is complete.

Try to respond quickly and accurately, but if you make a mistake just keep going. We'll try some practice trials first. Press the SPACEBAR to begin.

Run practice trial. Provide feedback as needed. After practice is finished, go on to the test. Read instructions out loud as they appear on each screen.

TEST:

[Examiner]: Now let's move on to the task, the instructions are the same but you will no longer receive feedback after your responses. When you have to match by COLOR, you should push the LEFT button for RED and the RIGHT button for BLUE.

When you have to match by shape, you should push the LEFT button for the TRIANGLE and the RIGHT button for the RECTANGLE.

Try to respond quickly and accurately, but if you make a mistake just keep going.

Press the SPACEBAR when you are ready to begin.

DOT COUNTING

MATERIALS & SET-UP: Score Sheet to record responses (attached)

Have Score Sheet ready to record responses. Read instructions out loud as they appear on each screen.

PRACTICE TRIAL:

[Examiner]: You will be shown a series of screens containing blue circles, green circles, and blue squares. You will count and remember the number of BLUE CIRCLES you see on each screen.

Count the BLUE CIRCLES out loud, one at a time, and then repeat the final total out loud IMMEDIATELY. This will indicate to the examiner that you have finished counting. *Press the SPACEBAR to continue.*

Screen with blue and green circles, and blue squares will appear. After participant counts each blue circle out loud, press the SPACEBAR to continue to the next screen.

How many BLUE CIRCLES did you count? *Press the SPACEBAR to continue.*

Now, you will count the BLUE CIRCLES on one screen, and then on another screen. Please begin counting the blue circles out loud as soon as they appear on each screen. Remember to repeat the final total out loud once you have finished counting.

After a number of screens you will see question marks. This will be your cue to repeat the final totals you counted on each screen in the correct order.

Let's do some practice first. Press the SPACEBAR to begin.

Run practice trials. Press the SPACEBAR after the participant has finished counting the dots on a screen and repeated the final total. Instruct participant to begin counting immediately after a new screen appears. Record participant's responses on the score sheet.

If the participant does not respond with any correct digit recalls for the practice trials, discontinue the task.

PROMPTS:

*If participant does not repeat the total out loud after counting, prompt only during the practice trials:
Remember to repeat the total out loud when you are finished counting on the screen.*

TEST:

[Examiner]: You have completed the practice trials. Let's continue with the task. The instructions are the same.

Count and remember the number of BLUE CIRCLES you see on each screen. Count the blue circles out loud, one at a time, and then repeat the final total out loud. Repeat the final numbers you counted when you see the question marks appear on the screen.

Press the SPACEBAR when you are ready to begin.

DOT COUNTING SCORE SHEET

ADMINISTRATION:

Record the numbers the participant counts out loud from each display in the **Response** column. The actual number of triangles on each screen is provided below. At the end of the trial record the numbers the participant recalls in the **Recall** column. Administer all trials.

SCORING:

Give 1 point for each correct digit recalled in each trial. Give 1 point if the number given as a response is not correct, but the number recalled is the same number. Record total in **Correct** column. Add **Correct** values and record total at bottom of page (See Manual for complete scoring instructions).

Practice: a. $\frac{\quad}{5}$ b. $\frac{\quad}{4}$ $\frac{\quad}{7}$ c. $\frac{\quad}{6}$ $\frac{\quad}{2}$ $\frac{\quad}{4}$

Response:	Recall:	# Correct
1. $\frac{\quad}{6}$ $\frac{\quad}{9}$	1. ___ ___	= _____
2. $\frac{\quad}{8}$ $\frac{\quad}{2}$ $\frac{\quad}{3}$	2. ___ ___ ___	= _____
3. $\frac{\quad}{9}$ $\frac{\quad}{7}$ $\frac{\quad}{8}$ $\frac{\quad}{2}$	3. ___ ___ ___ ___	= _____
4. $\frac{\quad}{4}$ $\frac{\quad}{2}$ $\frac{\quad}{8}$ $\frac{\quad}{5}$ $\frac{\quad}{3}$	4. ___ ___ ___ ___ ___	= _____
5. $\frac{\quad}{3}$ $\frac{\quad}{4}$ $\frac{\quad}{6}$ $\frac{\quad}{7}$ $\frac{\quad}{8}$ $\frac{\quad}{5}$	5. ___ ___ ___ ___ ___ ___	= _____
6. $\frac{\quad}{5}$ $\frac{\quad}{6}$ $\frac{\quad}{3}$ $\frac{\quad}{2}$ $\frac{\quad}{7}$ $\frac{\quad}{4}$ $\frac{\quad}{8}$	6. ___ ___ ___ ___ ___ ___ ___	= _____
TOTAL (Add values in column together for Trials 1 thru 6)		= _____ / 27

CPT/Go-No-Go

MATERIALS & SET-UP: *Use Left arrow key only.*

Read instructions out loud as they appear on each screen.

PRACTICE TRIAL:

[Examiner]: You will be presented with different objects on the screen. If an UPRIGHT TRIANGLE is presented on the screen, press the left arrow key. If any other shape is presented, do not press any key. Respond as quickly as you can without making mistakes. If you do make a mistake just keep going.

Check that participant's finger is appropriately placed on Left arrow key. Encourage participant to keep finger in place until task is complete.

We will start with some practice trials. Press the SPACEBAR to begin.

Run practice trial. Provide feedback as needed. The instructions are the same for each trial. After practice is finished, move on to the test.

TEST:

[Examiner]: Now let's move on to the actual test. Press the SPACEBAR when you are ready to begin.

1-BACK

MATERIALS & SET-UP: *Use Left and Right arrow keys.*

Read instructions out loud as they appear on each screen.

[EXAMINER]: You will see a series of white squares appear on the screen. Remember the location of each square when it appears. You will compare it to the location of the next square you see.

If a square matches the location of the previous square, press the LEFT button for YES. If a square does not match the location of the previous square, press the RIGHT button for NO. In between each square, a number will appear in the middle of the screen. Say that number out loud. We'll try some practice trials first. Press the SPACEBAR to begin.

Remember the location of this square, so you can compare it to the location of the next square you see.

Press SPACEBAR to continue. Number appears in the middle of the screen. Say this number out loud. Screen advances. Next square appears on screen. Is this location the same as the one just before? If YES press the LEFT key. If NO press the RIGHT key. Prompt participant to respond.

Read instructions for first 3 squares and continue reading if participant shows difficulty understanding task. Provide feedback as needed. If participant performs well, the practice trial will begin.

[Examiner]: Let's try a few more practice squares! For this practice round, You will not receive any directions or feedback. Compare the location of each square to the one just before. Say the number aloud when you see it. Press the SPACEBAR to begin.

Verbalize instructions and provide guidance as needed to help participant understand task. Go on to the practice trial.

PRACTICE TRIAL:

[Examiner]: Let's try a few more practice squares. You will not receive directions or feedback for this round. Each square will appear for a shorter time. Please respond as quickly as possible without making mistakes. Press the SPACEBAR to begin.

Run practice trial. Provide feedback as needed.

After practice is finished, move on to the task.

TEST:

[Examiner]: It is now time to begin the test. Please respond as quickly as possible without making mistakes. Press the SPACEBAR when you are ready to begin.

2-BACK

MATERIALS & SET-UP: Use Left and Right arrow keys.

Read instructions out loud as they appear on each screen.

[Examiner]: Now we will move on to the second part of this task. Once again, you will see a series of white squares appear on the screen and remember the location of each square when it appears. This time, you will compare each square to the location of the square TWO before it. Press the SPACEBAR to continue.

If a square matches the location of the square TWO before it, press the LEFT button for YES. If a square does not match the location of the square TWO before it, press the RIGHT button for NO. Start responding with the third square. We'll try some practice trials first. Press the SPACEBAR to begin.

Remember the location of this square, so you can compare it to the location of the square after the next one. Press SPACEBAR to continue. Also remember the location of this square so you can compare it to the location of the square after the next one. Press SPACEBAR to continue. Does this location match the location TWO before? If YES, press the LEFT key. If NO, press the RIGHT key. Prompt participant to respond.

Read instructions for first 4 squares and continue reading if participant shows difficulty understanding task. Provide feedback as needed. If participant performs well, the practice trial will begin. Otherwise, a slow example trial will begin:

Verbalize instructions and provide guidance as needed to help participant understand task. Go on to the practice trial.

PRACTICE TRIAL:

[Examiner]: Let's try a few more practice squares. Now, each square will appear for a shorter time. Remember to compare each square to the one TWO before. Start responding with the 3rd square. Please respond as quickly as possible without making mistakes. Press the SPACEBAR to begin.

Run practice trial. Provide feedback as needed. If participant performs well, the test will begin. Otherwise, a new practice trial will begin. The instructions are the same for each trial. If the participant does not perform well on all practice, the task will end.

After practice is finished, move on to the test.

TEST:

[Examiner]: It is now time to begin the task. Please respond as quickly as possible without making mistakes. Press the SPACEBAR when you are ready to begin.

After test is complete:

[Examiner]: The task is complete. This was a challenging test and we want to make sure you understood the instructions. Please explain the instructions to the examiner.

Record response below.

Verbalized correct understanding? Yes No

ANTI-SACCADES

MATERIALS & SET-UP: Score Sheet to record responses (attached). You will need to have the audio setting on the computer adjusted to an audible level.

Set computer centered in front of participant. Computer screen should be approximately 31 inches (80 cm) away from participant and as close to eye level as possible. See Manual for more detailed instructions on set-up.

For both Pro-Trials and Anti-Trials, sit across from the participant so that you are facing him/her. You will not be able to see the computer display. Be sure you can see the participant's eyes.

PRO-TRIAL:

[Examiner]: We are going to do a task to watch your eye movements. You will see a dot in the center of the screen. *Point to the center of the computer screen.*

Move your eyes in the direction the dot moves, which will be either to the left side or to the right side of the screen.

After you have looked in the direction of the dot, return your eyes to the center of the screen.

Do not move your head, just your eyes.

Press the SPACEBAR to continue.

Press the SPACEBAR when you are ready to begin the task. When the task begins, a recorded voice on the computer program will announce the number of each trial. Listen to the number announced to ensure you are recording each eye movement for the correct trial. Record initial direction of eye movement.

There are 10 trials for Pro-Saccades.

After the Pro-Saccades test, the instructions to the Anti-Saccades test will appear on the screen:

ANTI-TRIAL:

[Examiner]: Now we will move on to the second part of eye movement task. Again, you will see a dot in the center of the screen. *Point to the center of the computer screen.* This time, I would like you to use your eyes to look in the opposite direction of where the dot moves. Do not move your head, just your eyes. After looking at the opposite side of where the dot is, return your eyes to look at the dot at the center of the screen. *Press the SPACEBAR to begin the practice trial.*

Now we will begin the task. Use your eyes to look in the OPPOSITE direction of where the dot moves. Do not move your head, just your eyes. After looking at the opposite side of where the dot is, return your eyes to the center of the screen.

Press the SPACEBAR to continue.

Again, you will see a dot in the center of the screen. Use your eyes to look in the OPPOSITE direction of where the dot moves. Do not move your head, just your eyes. After looking at the opposite side of where the dot is, return your eyes to the center of the screen.

Press the SPACEBAR to continue.

SACCADES SCORE SHEET

ADMINISTRATION:

Mark the left or right box for each trial to correspond with the direction of initial eye movement, *from the examiner's perspective*. A recorded voice will help to keep track of the trials.

SCORING:

Count the number of marked boxes that are not grayed out as the number of correct responses.

PRO-TRIAL	← EYES	EYES →
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Total Correct: _____ / 10

ANTI-TRIAL 1	← EYES	EYES →
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Total Correct: _____ / 20

ANTI-TRIAL 2	← EYES	EYES →
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Total Correct: _____ / 20

SOCIAL NORMS EVALUATION

Administer to all participants. For participants age 14 and older, administer Adult Social Norms Evaluation. For participants under age 14, administer Child Social Norms Evaluation. Make sure all items are answered.

Instructions for Adult Social Norms Evaluation:

[Examiner]: The following is a list of behaviors that a person might do. Please decide whether or not it would be socially acceptable and appropriate to do these things in the mainstream culture of the United States, and answer yes or no to each. Think about these questions as they would apply to interactions with a stranger or acquaintance, NOT with a close friend or family member.

Instructions for Child Social Norms Evaluation:

[Examiner]: The following is a list of things that a kid might do. Please decide whether other people would mind if you did each thing, or whether it might bother them. Pretend all the kids in your class, and your teacher, see you do these things, and decide if they will think it's OK.

DATA COLLECTION/RESEARCH QUALITY NOTES

Quality Issues:

- None, Data are Valid (Skip)
- Yes (Choose up to 3 issues)

- Motor Difficulties
- Speech Difficulties
- Hearing Impairment

- Visual Impairment
- ESL
- Minimal Education

- Lack of Effort
- Unreliable Informant
- Behavioral Disturbances
- Other (*Describe in Notes*)

Data Quality Notes:

Data Collection Notes:

BEHAVIOR RATING SCALE

INSTRUCTIONS:

To be completed by the Examiner. Following the administration of the battery to the study participant, indicate the presence of the following behavioral features observed during the examiners' time with the study participant. None indicates the absence of the feature. When the feature is present, rate it as mild, moderate or severe depending on the extent to which it disrupts the testing or interpersonal exchanges, or the extent to which it deviates from accepted norms.

Please circle the most accurate response regarding the participant's behavior.

ITEM DESCRIPTORS AND BEHAVIOR CHECKLIST:

1. Agitation	None	Mild	Moderate	Severe
2. Stimulus-boundedness	None	Mild	Moderate	Severe
3. Perseverative	None	Mild	Moderate	Severe
4. Decreased initiation	None	Mild	Moderate	Severe
5. Motor stereotypies	None	Mild	Moderate	Severe
6. Distractibility	None	Mild	Moderate	Severe
7. Lack of social/emotional engagement	None	Mild	Moderate	Severe
8. Impulsivity	None	Mild	Moderate	Severe
9. Socially inappropriate	None	Mild	Moderate	Severe

Descriptions: _____

GENERAL GUIDELINES:

Examiners should restrict their ratings to behaviors that they have observed, and not use this rating scale to reflect behaviors that are described by caregivers, informants, or other health care professionals but not directly observed by the examiner. Examiners should include all observed behaviors, regardless of the context. Thus, although behaviors during the actual assessment will likely provide the bulk of data, examiners should also note behaviors exhibited in all other situations, such as the waiting room and walking to and from the exam room.

There will be some instances when raters will have to decide which of several potential categories to rate a particular behavior. For example, repeatedly picking up a pencil from the table and scribbling on test forms could be potentially viewed as perseverative, stimulus-bound, or motor stereotypy. It is important for raters to select only one category for an observed behavior. Typically, raters will have to use their best clinical judgment as to the most appropriate category. Some suggestions for determining which category to select are mentioned below. Use the space in the bottom half of the rating page to describe the behavior. This is particularly important step for subjects being evaluated longitudinally in the event that a different rater will be seeing the subject at the next visit.

DETERMINING SEVERITY:

As a general rule, the severity of the observed behavior should reflect the extent to which it disrupts the testing or interpersonal exchanges, or the extent to which it deviates from generally accepted norms. Mild refers to an infrequent occurrence of the behavior or if the behaviors observed are present but relatively insignificant. Subjects are easily redirected and there is no or minimal impact on the quality of the testing. A rating of moderate would indicate that the occurrence of behaviors begin to infringe on the quality of the data and neuropsychological test performance. Subjects are less easily redirected. For example, if a subject cannot take social cues from the examiner and continues discussing topics that are inappropriate for the clinical setting, 'Socially Inappropriate Behavior' would be rated as 'moderate'. A rating of 'severe' indicates that the behavior occurs very frequently throughout the testing situation. For example, Distractibility would be rated as 'severe' when the subject is very difficult to redirect to the task at hand and, to the point that test validity is questionable. Additional examples are provided below.

SPECIFIC BEHAVIORS:

- 1. Agitation:** Agitation can involve inappropriate verbal (screaming, cursing) or physical (repetitive body movements, hitting or throwing objects) behaviors and can be aggressive or non-aggressive in nature (pacing versus kicking). Mild agitation might manifest itself as being anxious to complete the evaluation, argumentative, or complaining about testing. Moderate levels might include disruptive but not harmful behaviors that cannot be easily redirected. Severe agitation would include physical behaviors that put others or self in danger (e.g., hitting, pushing, scratching, throwing things, biting or kicking) or extreme verbal aggression (e.g., screaming or cursing loudly).
- 2. Stimulus-boundedness:** Stimulus-boundedness is an inappropriate response to a salient environmental stimulus. Such behaviors could include unsolicited reading of nearby text, environmental dependency (e.g., picking up a pen from the table and writing; eating food from someone else's plate), excessive attention to irrelevant objects (e.g., picking up objects from floor), echolalia, or, during cognitive testing, writing or drawing on a model or adjacent stimulus. The occurrence of even one instance of stimulus-boundedness warrants a mild rating. Examples of 'moderate' include closing in on a stimulus or being distracted by adjacent stimuli and these behaviors result in clearly impaired performance. Environmentally dependent behaviors occur often and subject cannot be easily redirected. Subjects whose environmental dependency makes task completion very difficult would be rated as severe.
- 3. Perseverative:** Perseveration is the inappropriate and unintentional persistence of a behavior, and can be observed behaviorally, on testing, and in conversational speech. As observed on testing, the persisting behavior may be (1) a repetition of a previously generated response within a task, or (2) a repetition of a response appropriate to an earlier task or condition. As observed in conversational speech, a participant appears stuck on an idea or persistently returns to a previously voiced idea or story. (A few repeated responses during testing are not uncommon in normal individuals, so this behavior should only be scored as present when the frequency deviates from normative expectations). Repetitions that slightly exceed normative expectations would be rated as mild. A moderate rating would be given any time the subject makes a perseverate response without any intervening responses (e.g., drawing the exact same design two or more times in a row on Design Fluency) or reverts to previously established response set (e.g., on Category Fluency, gives responses only beginning with the letter L as required by

the previous task, or makes numerous perseverations of any type. A pervasive tendency to perseverate that interrupts the testing would be rated as severe.

4. **Decreased initiation:** Behaviors suggesting decreased initiation include delayed time to start verbal and/or motor response after being given task instructions, need for additional prompting to initiate a response, and low motivation to perform well. This would also include instances when a subject stops in the middle of a task and requires additional prompts to continue. Note: If decreased initiation occurs only in the context of lack of social engagement or distractibility, code as those domains rather than decreased initiation.

5. **Motor stereotypies:** These are persistent, repetitive behaviors without a clear purpose. Examples include pacing without apparent purpose, rummaging through pockets or drawers, picking at skin or clothes, handling buttons, repeatedly putting on and removing jewelry or clothing, repeated lip smacking or other sounds, or repeating phrases that have no communicative value. Note: If a behavior is coded as a motor stereotypy, that same behavior should not also be coded as a perseveration.

6. **Distractibility:** Attention is easily diverted away by external stimuli (people, objects, etc.), outside noise, or internal thought. This is observed when the subject loses his/her train of thought, needs multiple reminders about instructions, needs to have their attention redirected to the task at hand, or engages in tangential speech or thought. This can be rated as mild if the distractibility is occasional and does not significantly interfere with collecting valid test data, moderate if the subject needs several reminders and redirection, but still able to complete evaluation and severe if the distractibility significantly disrupts testing to the point that validity is questionable.

7. **Lack of Social / Emotional Engagement:** This refers to the examiner's impression that the subject displays signs of diminished social interest, interrelatedness, or personal warmth. Examples of behaviors might include lack of eye contact, excessive eye contact (e.g., staring), lack of smiling or reduced range of facial affect (unrelated to Parkinson's disease), lack of awareness of how subject's behavior might affect others, lack of interest in others. Additional behaviors include lack of spontaneity and not initiating conversations. The main distinction between lack of social engagement and social inappropriateness is that lack of social engagement typically reflects an absence of behavior (e.g., empathy, warmth) whereas social inappropriateness typically reflects the distinct presence of an inappropriate behavior (e.g., inappropriate touching or remarks).

8. **Impulsivity:** This refers to acting with insufficient forethought or patience. Potential behaviors include beginning a task before examiner completes instructions, responding to only part of the instructions (e.g., the first part of multi-step instructions), a careless approach to work, finishing too quickly, and interrupting the examiner. A mild rating would refer to when the examinee works quickly without checking work, appears bored when solving complex problems, or starts one test item before the examiner completes the instructions or without adequate planning time. For a moderate rating, the examinee might respond carelessly at the expense of accuracy, start test items before the examiner completes the instructions or without adequate planning time on more than one occasion, or otherwise tend to do or say things rapidly and without planning. An example of severe impulsivity might be when a participant's tendency to act without forethought disrupts the testing or interpersonal exchanges, or markedly deviates from normal behavior.

9. **Socially inappropriate:** Refers to conduct which may not be suitable in professional settings. Examples may include talking to strangers on the elevator, questioning the examiner/clinician about personal information or their credentials, disregard for or violation of personal space (e.g., excessive or inappropriate touching of examiner), or lack of response to social cues (e.g., when others attempt to end a conversation). Out-of-place topics, crude or sexually oriented comments, jokes or opinions that may be offensive to others, or poor hygiene/grooming (malodorous, stained, torn, or inappropriate clothing) can also fall under this category. Physical behaviors such as flatulence, touching private body parts, belching, and spitting can also be considered.

CHILD SOCIAL INTERACTIONS

INSTRUCTIONS: The following is a list of things that a kid might do. Please decide whether other people would mind if you did each thing, or whether it might bother them. Pretend all the kids in your class, and your teacher, see you do these things, and decide if they will think it's OK.

Would other people think it's OK to:

1. Pick your nose in class?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
2. Ask your teacher how to get to the library?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
3. Tell a kid you don't like them?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
4. Ask your teacher for a ride to the store?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
5.. Blow your nose on the bus?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
6. Borrow your friend's new shirt without permission?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
7. Brush your teeth once a week?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
8. Take a library book home from school?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
9. Wear the same shoes three days in a row?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
10. Keep money you find on the sidewalk?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
11. Tell another kid they have weird hair?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
12. Laugh at yourself when you trip and fall down?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
13. Kick a ball really hard?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
14. Laugh loudly during a movie at the theater?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
15. Push another kid so you get to the swings first?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
16. Throw your lunch trash on the floor?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
17. Ask a kid if they want to come over to your house?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
18. Eat the last cookie from the cookie jar?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
19. Take the classroom markers home from school?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
20. Rush to sit in the front row the first day of class?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
21. Take a bath or shower every day?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
22. Laugh at a kid when they trip and fall down?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
23. Talk loudly during a movie at the theater?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
24. Talk with your mouth full?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
25. Keep your classmate's game they left on the playground?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
26. Tell another kid they are smart?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
27. Kick the trashcans at school?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
28. Throw your leftover lunch away?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
29. Use a spoon to eat macaroni and cheese?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
30. Wear the same shirt three days in a row?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

ADULT SOCIAL INTERACTIONS

The following is a list of behaviors that a person might do. Please decide whether or not it would be socially acceptable and appropriate to do these things in the mainstream culture of the United States, and answer yes or no to each. Think about these questions as they would apply to interactions with a stranger or acquaintance, NOT with a close friend or family member.

Would it be socially acceptable to:

1. Tell a stranger you don't like their hairstyle?	OYES	ONO
2. Spit on the floor?	OYES	ONO
3. Blow your nose in public?	OYES	ONO
4. Ask a coworker their age?	OYES	ONO
5. Cry during a movie at the theater?	OYES	ONO
6. Cut in line if you are in a hurry?	OYES	ONO
7. Laugh when you yourself trip and fall?	OYES	ONO
8. Eat pasta with your fingers?	OYES	ONO
9. Hug an acquaintance without asking first?	OYES	ONO
10. Tell a coworker your age?	OYES	ONO
11. Tell someone your opinion of a movie they haven't seen?	OYES	ONO
12. Laugh when someone else trips and falls?	OYES	ONO
13. Wear the same shirt every day?	OYES	ONO
14. Keep money you find on the sidewalk?	OYES	ONO
15. Pick your nose in public?	OYES	ONO
16. Tell a coworker you think they are overweight?	OYES	ONO
17. Drive fast if you are in a hurry?	OYES	ONO
18. Eat ribs with your fingers?	OYES	ONO
19. Tell a stranger you like their hairstyle?	OYES	ONO
20. Wear the same shirt twice in two weeks?	OYES	ONO
21. Tell someone the ending of a movie they haven't seen?	OYES	ONO
22. Hug a stranger without asking first?	OYES	ONO
23. Talk out loud during a movie at the theater?	OYES	ONO
24. Tell a coworker you think they have lost weight?	OYES	ONO

Appendix A
Additional Testing Materials

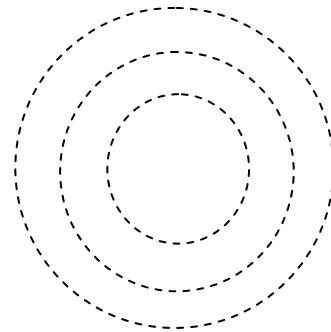
PRACTICE PUZZLES:

On this page are examples of some of the puzzles you will see in this task. Complete each of the items below for practice.

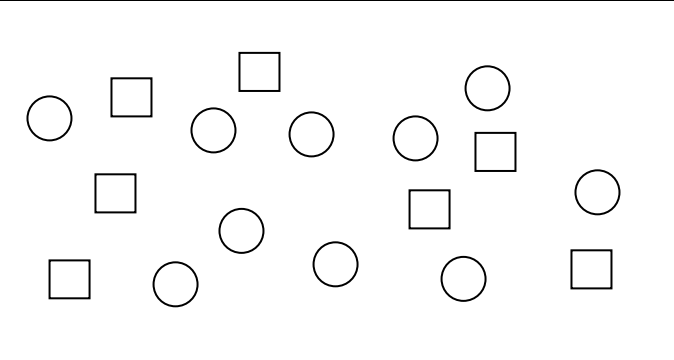
Fill in the empty boxes with the same symbol.

△	△	△	△	△	△	△

Trace the dotted lines.



How many circles? (○) ____



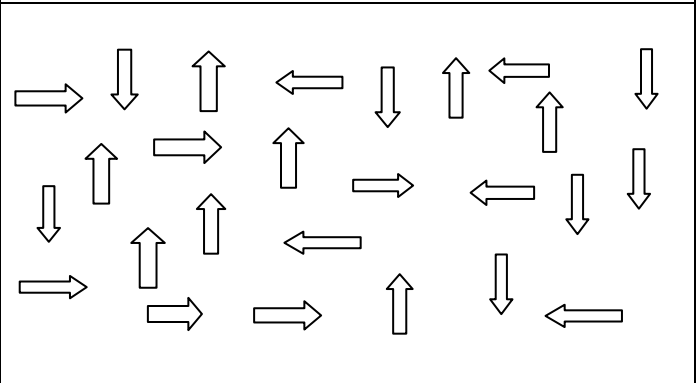
Solve the problems below.

5	8	9	8
<u>+ 3</u>	<u>+ 5</u>	<u>- 4</u>	<u>- 8</u>

Cross out all of the circles (○).

◇	○	□	△	○	○	□	△
○	○	◇	○	○	△	□	△
△	◇	□	◇	○	□	△	◇

Circle the arrows pointing UP (↑).



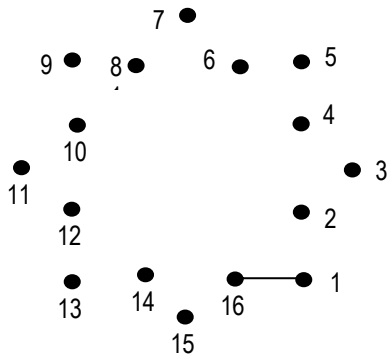
INSTRUCTIONS:

You can earn points by completing the puzzles in these booklets. Some are easier than others. You will only have 6 minutes to earn as many points as possible so choose your puzzles carefully. Be sure to complete items accurately in order to receive full credit. You do not have to do all of the pages in a book, and you do not have to do all of the puzzles on a page.

GOAL: Earn as many points as possible.

5 pts.

Connect the dots.



75 pts.

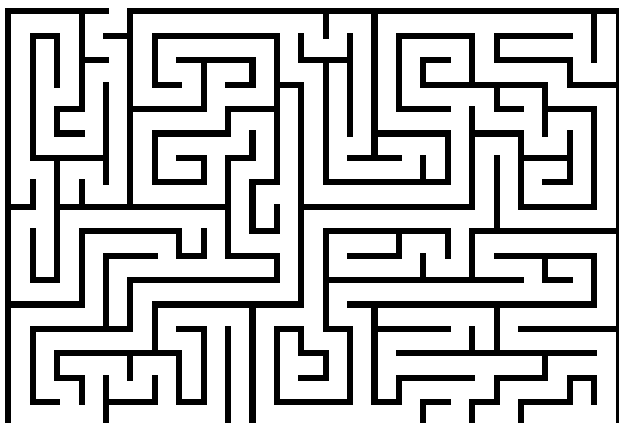
Fill in the missing numbers.

0	1	2	3	4	5	6	7	8	9
0	1				5				9
				4					
0						6			9
0	1						7		
	1							8	
0		2		4					9
	1				5	6			9
	1			4			7		9

75 pts.

Complete the maze.

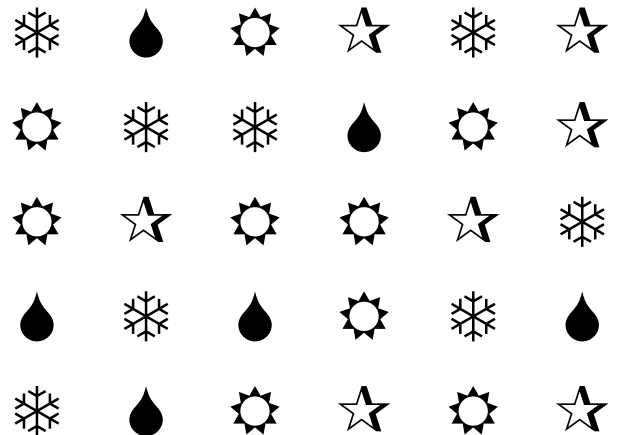
↓ Start here



↓ End here

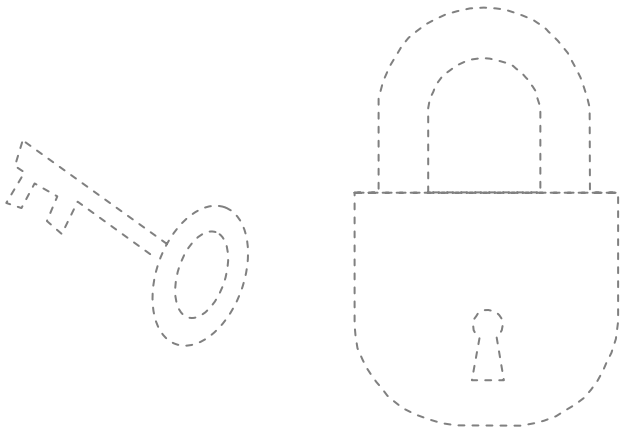
20 pts.

Cross out all of the snowflakes (❄).



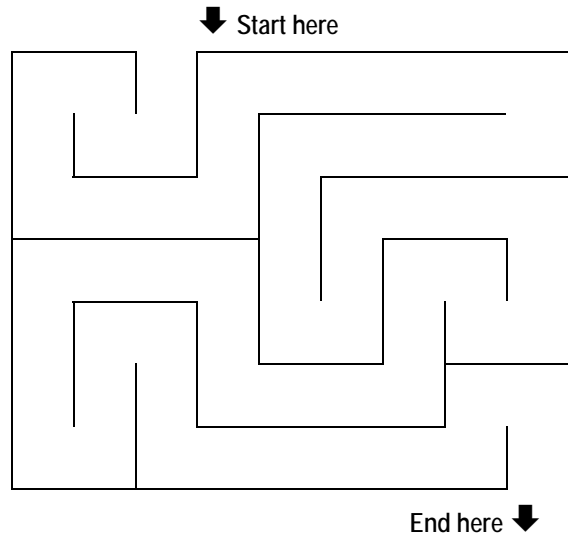
5 pts.

Trace the dotted lines.



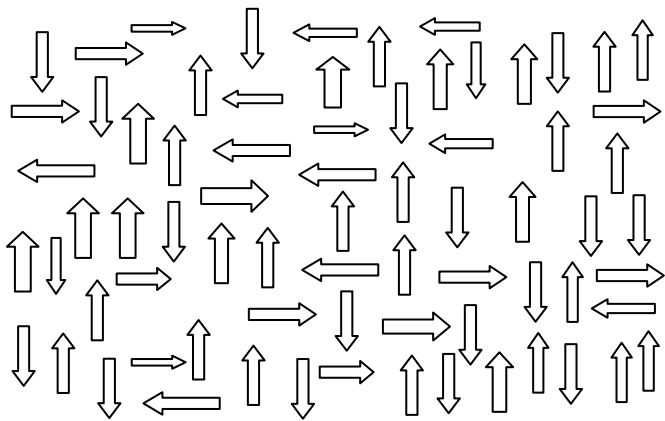
20 pts.

Complete the maze.



75 pts.

Circle the arrows pointing UP (↑).



75 pts.

Fill in the empty boxes with the same symbol.

e	ə	e	ə	e	ə	e	ə	e	ə	e	ə

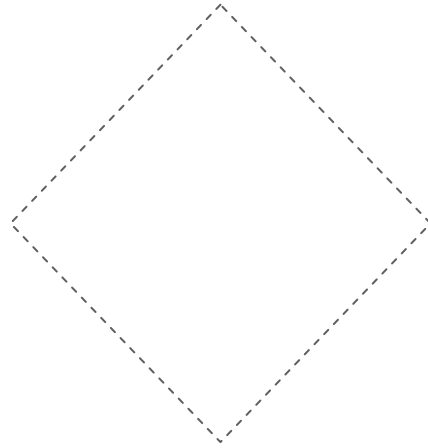
15 pts.

Fill in the empty boxes with the same symbol.

↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
↑									
↑									
↑									
↑									
↑									

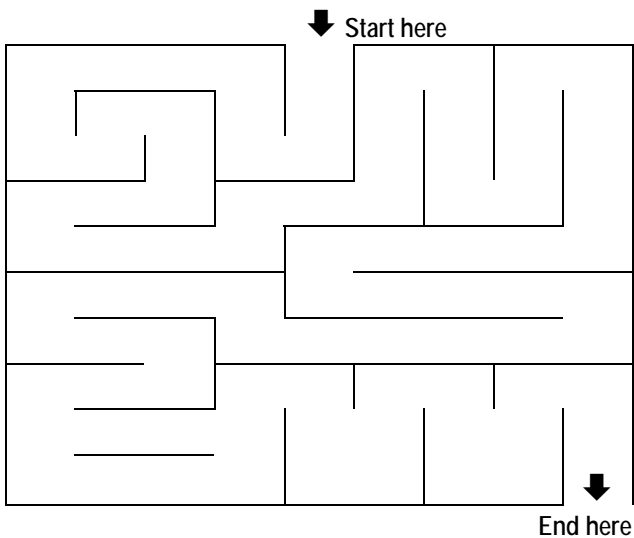
10 pts.

Trace the dotted lines.



10 pts.

Complete the maze.



50 pts.

Fill in the missing numbers.

1	2	3	4	5	6	7	8	9
		3		5		7		9
1	2		4			7		9
1		3		5	6		8	
	2		4		6		8	
1								9
	2	3		5		7	8	
			4					9
1		3		5	6		8	

5 pts.

Cross out all of the stars (☆).



1 pt.

Solve the problems below.

$2+5 = \underline{\quad}$

$6+2 = \underline{\quad}$

$1+6 = \underline{\quad}$

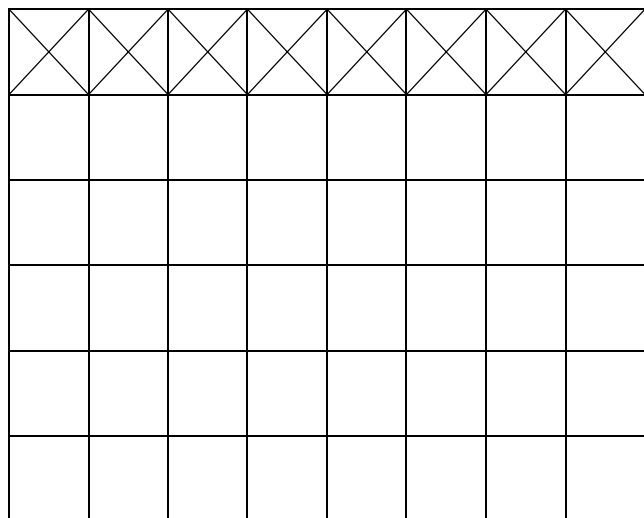
$3+4 = \underline{\quad}$

$5+7 = \underline{\quad}$

$9+4 = \underline{\quad}$

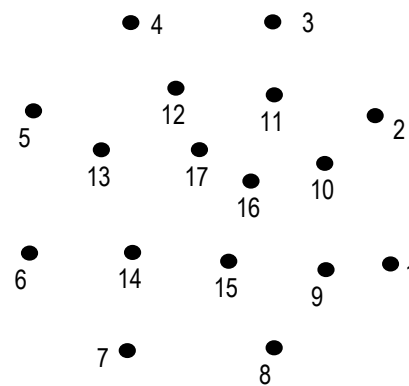
10 pts.

Fill in the boxes with the same symbol.



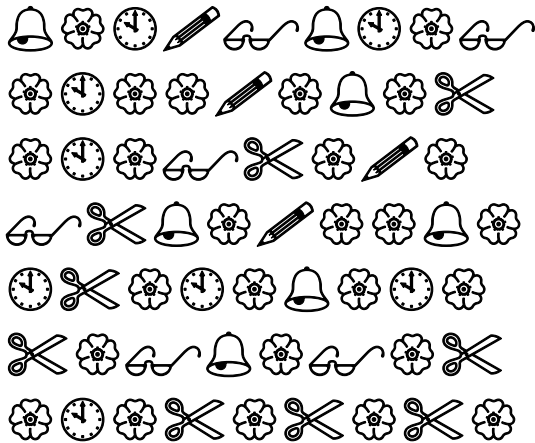
10 pts.

Connect the dots.



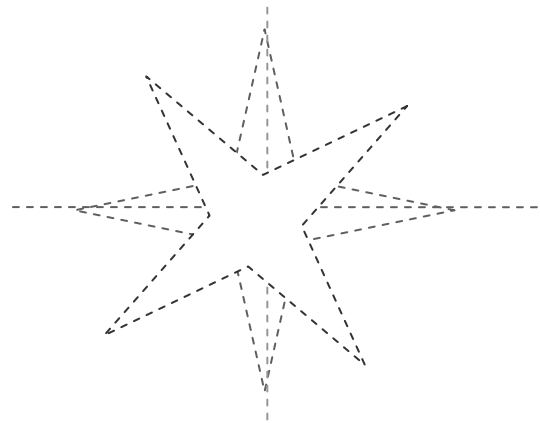
5 pts.

Circle all of the ().



1 pt.

Trace the dotted lines.



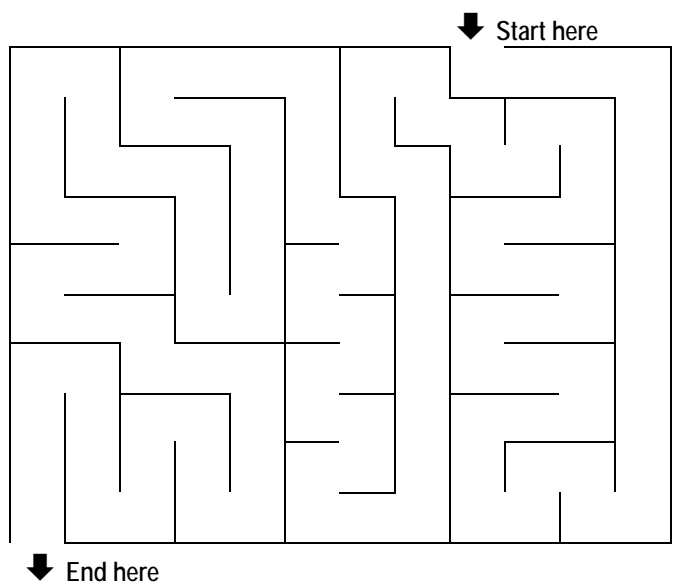
5 pts.

Cross out all of the number 3's.

3	9	5	5	2	1	9	3	3	4
0	5	5	3	0	4	9	3	5	3
7	6	3	0	9	3	5	2	3	4
3	2	5	1	3	4	6	9	3	5
2	3	0	5	9	3	7	8	2	1
9	3	1	7	3	6	4	3	8	3
1	0	3	3	2	3	1	9	0	4
3	8	7	4	0	2	3	8	6	3
0	1	3	6	3	7	3	1	9	3

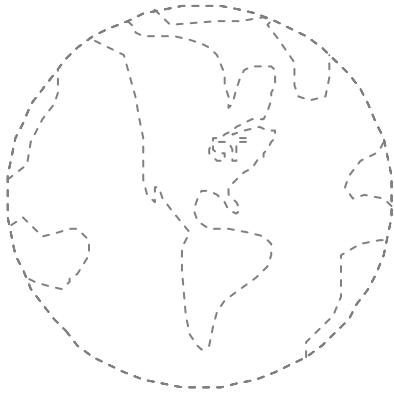
5 pts.

Complete the maze.



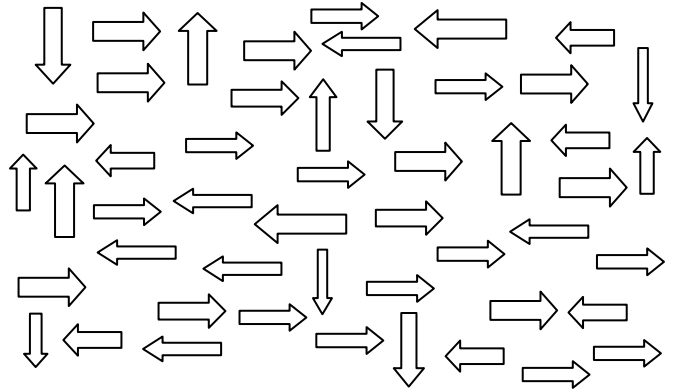
5 pts.

Trace the dotted lines.



5 pts.

Circle the arrows pointing RIGHT (→).



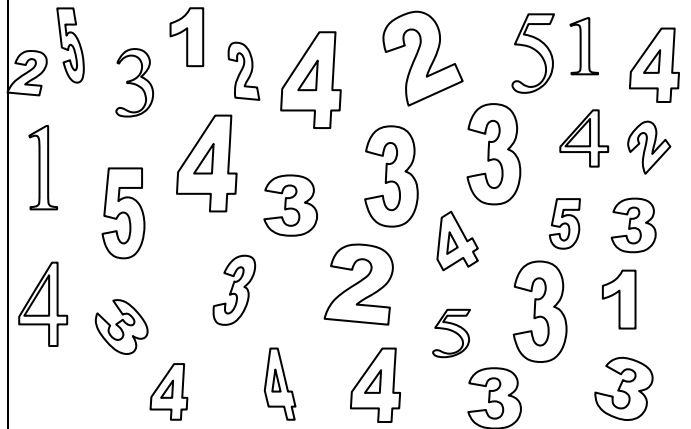
1 pt.

Fill in the empty boxes with the same symbol.

↑	↑	↑	↑	↑	↑
↑					
↑					
↑					
↑					

1 pt.

Circle the numbers 3 and 4.



INSTRUCTIONS:

You can earn points by completing the puzzles in these booklets. Some are easier than others. You will only have 6 minutes to earn as many points as possible so choose your puzzles carefully. Be sure to complete items accurately in order to receive full credit. You do not have to do all of the pages in a book, and you do not have to do all of the puzzles on a page.

GOAL: Earn as many points as possible.

20 pts.

How many circles (○)? _____

10 pts.

Solve the problems below.

$2+2 = \underline{\quad}$ $2+3 = \underline{\quad}$ $3+3 = \underline{\quad}$
 $4+4 = \underline{\quad}$ $4+5 = \underline{\quad}$ $5+5 = \underline{\quad}$
 $6+6 = \underline{\quad}$ $6+7 = \underline{\quad}$ $7+7 = \underline{\quad}$
 $8+8 = \underline{\quad}$ $8+9 = \underline{\quad}$ $9+9 = \underline{\quad}$

75 pts.

Trace the dotted lines.

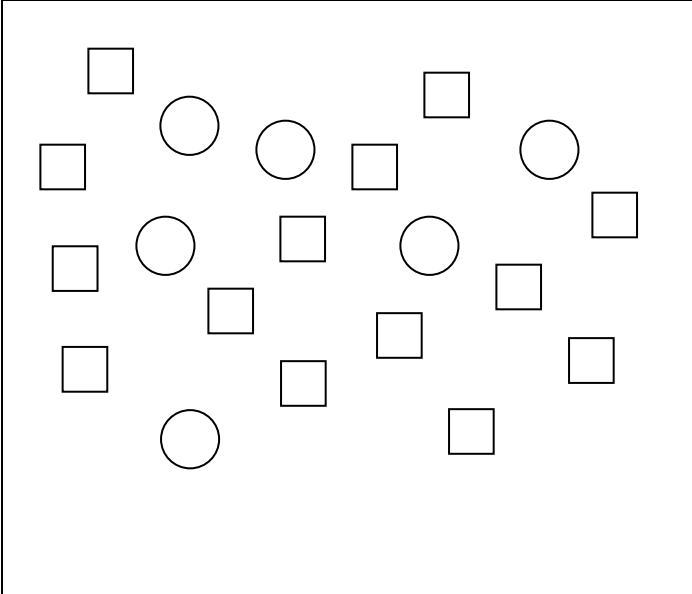
75 pts.

Cross out all of the arrows pointing LEFT (←).

←	↑	↓	←	→	↖	↗	↘	↕	←	↑	←
↓	↓	←	↖	→	↑	←	←	↑	↖	↓	→
→	←	↘	←	→	←	←	→	↓	←	←	→
↑	↓	←	↖	↗	↓	↓	←	←	↖	↓	↖
←	↓	↘	↑	←	↑	←	←	↘	↑	↓	←
←	↖	↓	←	↘	←	↖	→	→	←	↖	←
↓	↓	←	↖	→	↑	←	←	↑	↖	↓	→
↑	←	↓	←	↖	←	↓	→	↓	←	←	←
←	↓	↘	↑	←	↑	←	←	↘	↑	↓	←
↖	←	↓	←	↓	↓	←	↓	↓	←	←	←

20 pts.

How many squares (□)? _____



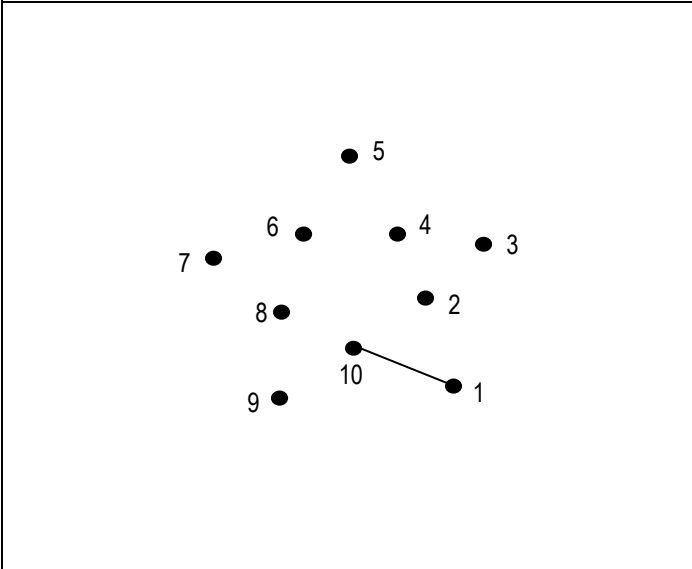
75 pts.

Cross out all the 23's and 32's.

22	34	23	44	33	22	42	33	22	32	23
30	25	34	23	24	24	32	32	22	23	32
23	32	32	22	32	32	34	43	22	33	23
33	22	43	33	34	43	23	24	33	43	34
22	34	24	44	43	24	32	32	43	24	22
24	22	42	44	22	22	43	33	24	43	33
34	32	33	32	23	43	23	44	32	43	24
23	23	24	23	44	34	24	22	43	22	32
32	34	23	32	32	22	23	33	42	32	24
32	43	32	33	24	33	42	24	33	44	32

5 pts.

Connect the dots.



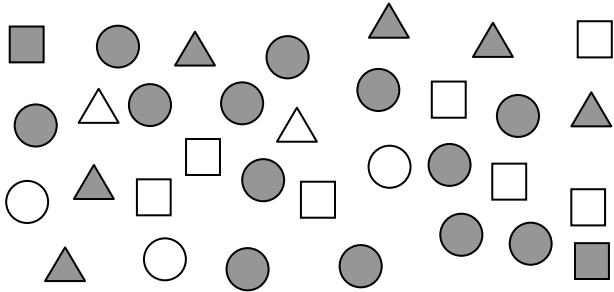
75 pts.

Fill in the empty boxes with the same symbol.

>>	>>	>>	>>	>>	>>
>>					
>>					
>>					
>>					
>>					

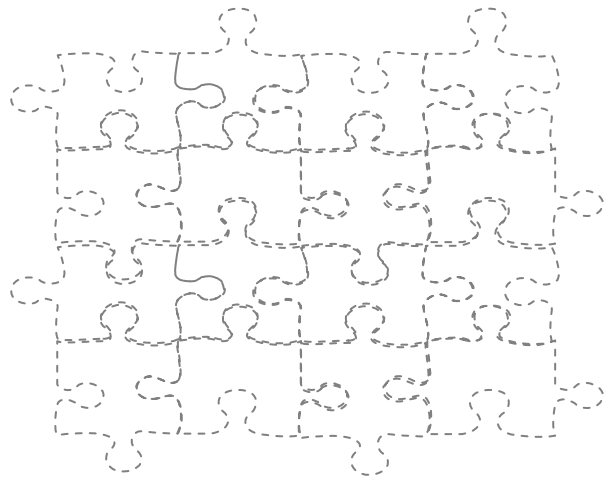
50 pts.

How many shaded circles (●)? _____



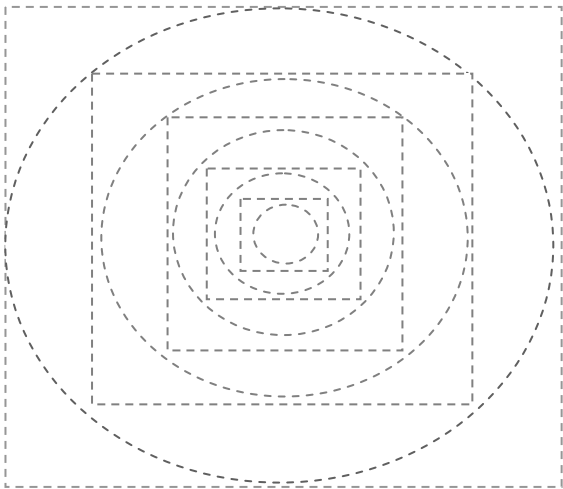
1 pts.

Trace the dotted lines.



10 pts.

Trace the dotted lines.



15 pts.

Fill in the boxes with the same symbol.

*	*	*	*	*	*	*	*	*	*
*									
*									
*									
*									
*									
*									

1 pt.

Solve the problems below.

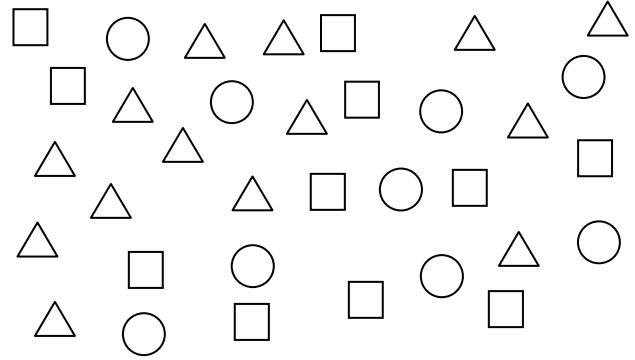
$5+5 = \underline{\quad}$ $2+3 = \underline{\quad}$

$4+6 = \underline{\quad}$ $1+9 = \underline{\quad}$

$8+6 = \underline{\quad}$ $8+9 = \underline{\quad}$

10 pts.

How many triangles (\triangle)?



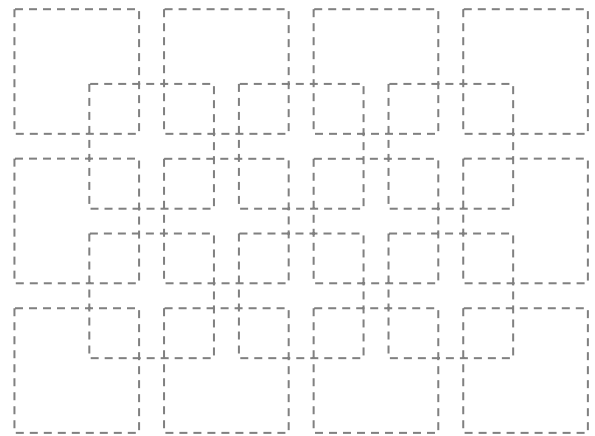
5 pts.

Fill in the boxes with the same symbol.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									

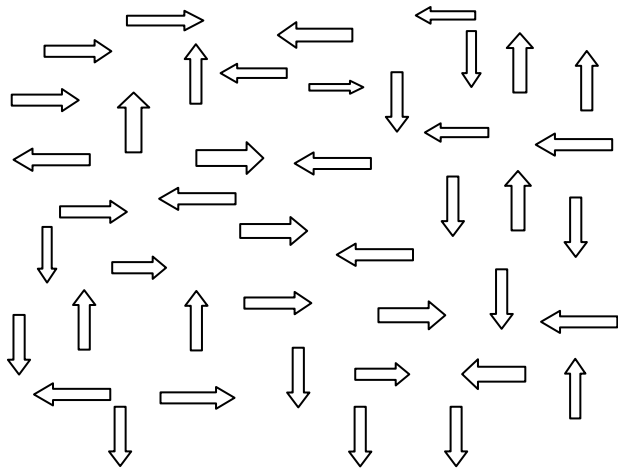
10 pts.

Trace the dotted lines.



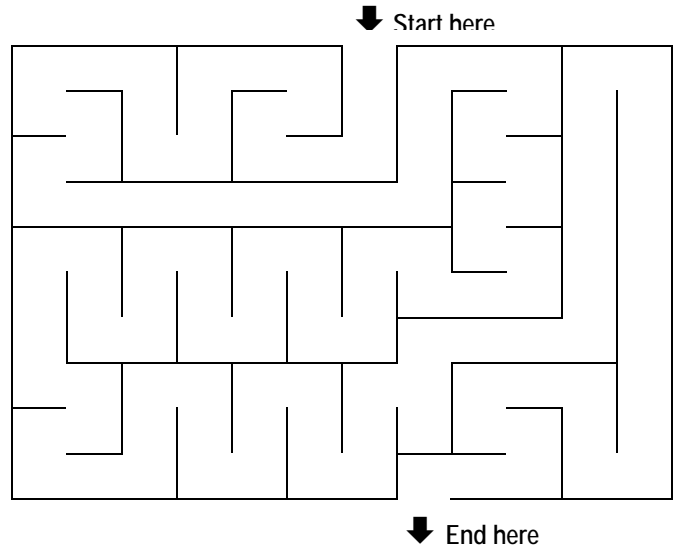
5 pts.

Circle the arrows pointing LEFT (←).



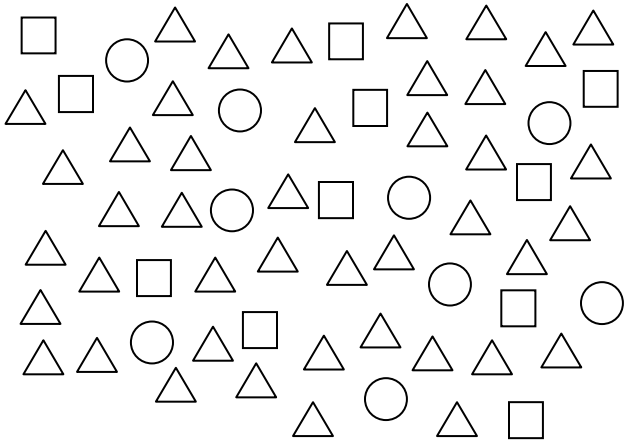
5 pts.

Complete the maze.



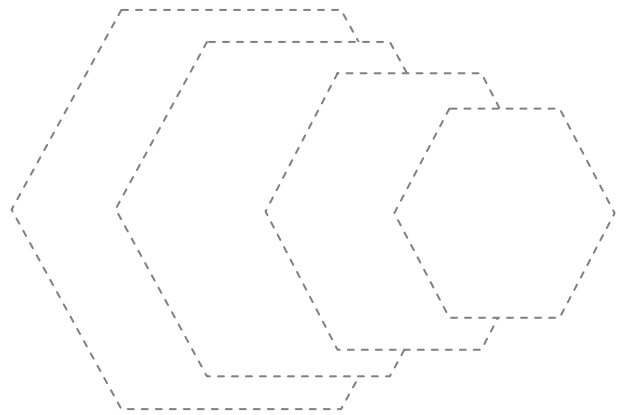
5 pts.

How many triangles (△)? _____



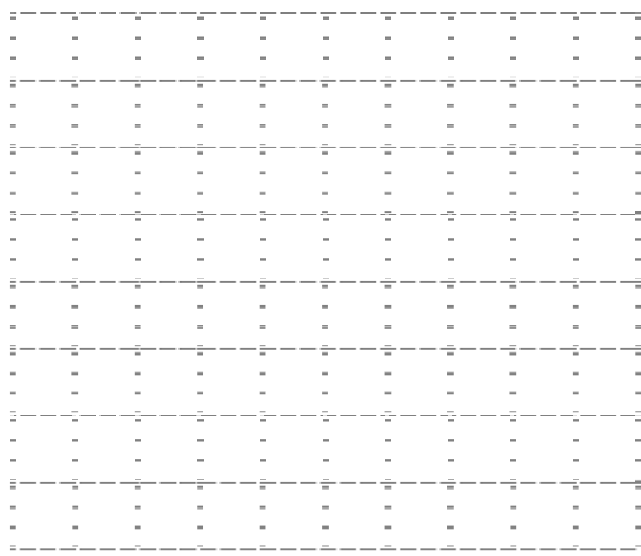
1 pt.

Trace the dotted lines.




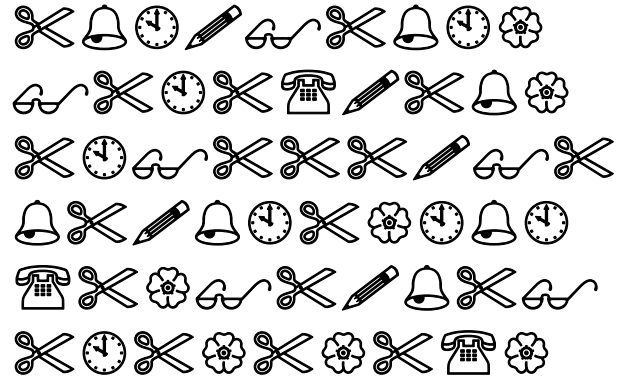
5 pts.

Trace the dotted lines.



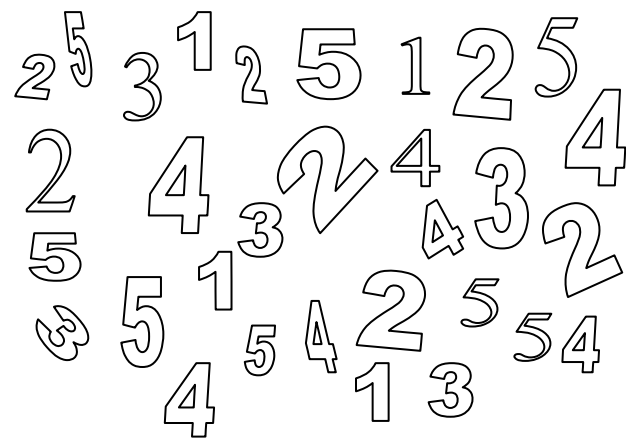
1 pt.

Circle all of the .




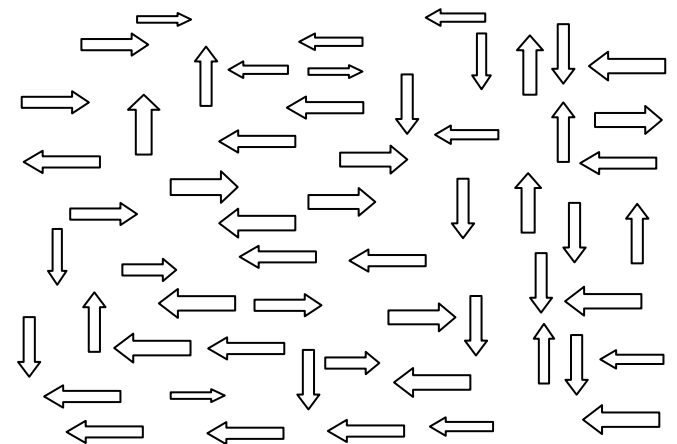
1 pt.

Circle the numbers 2 and 5.



5 pts.

Circle the arrows pointing LEFT ()



INSTRUCTIONS:

You can earn points by completing the puzzles in these booklets. Some are easier than others. You will only have 6 minutes to earn as many points as possible so choose your puzzles carefully. Be sure to complete items accurately in order to receive full credit. You do not have to do all of the pages in a book, and you do not have to do all of the puzzles on a page.

GOAL: Earn as many points as possible.

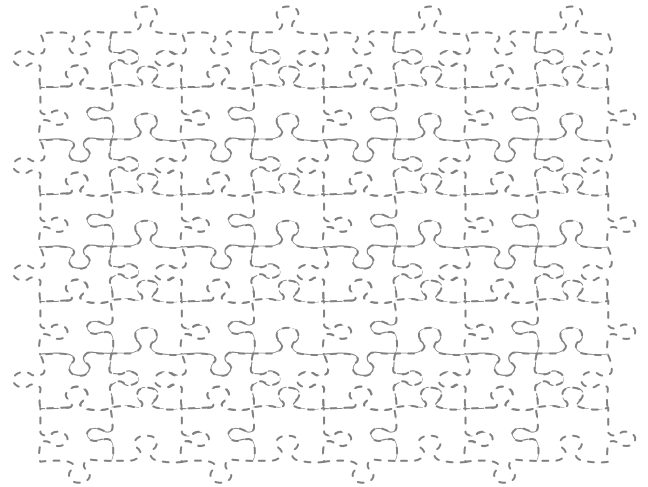
25 pts.

Solve the problems below.

$$\begin{array}{r} 6 \\ -3 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ -2 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ -7 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ -4 \\ \hline \end{array}$$

75 pts.

Trace the dotted lines.



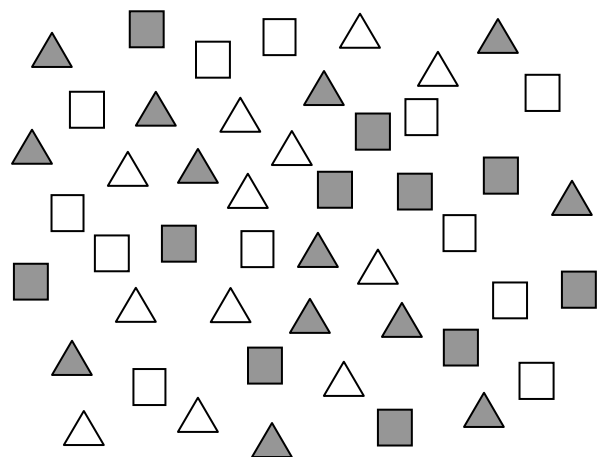
75 pts.

Cross out all of the letters J and K.

J	F	T	R	I	O	K	N
K	J	N	J	G	B	U	I
D	E	E	F	C	K	U	Y
J	K	J	B	A	B	N	J
I	A	B	D	K	L	P	O
V	J	Y	H	J	K	C	V
U	I	J	D	R	F	G	B
J	L	M	B	O	K	J	P

10 pts.

How many shaded squares (■)? _____



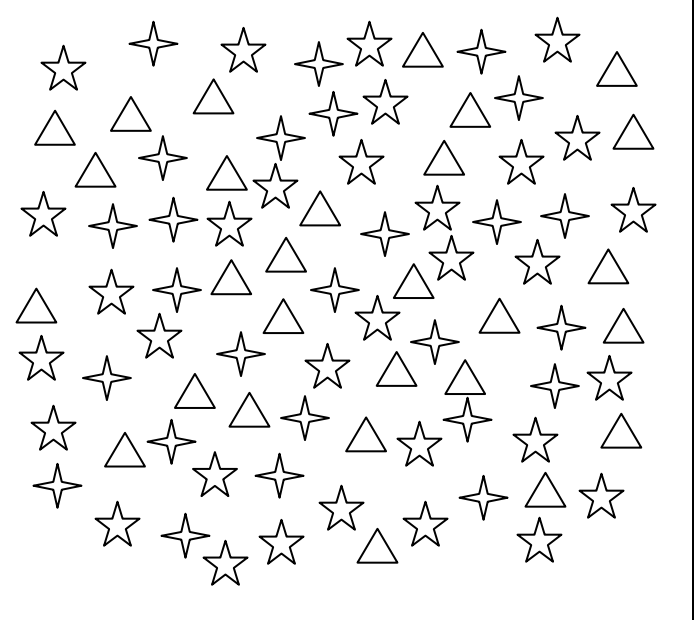
75 pts.

Fill in the missing numbers.

1	2	3	4	5	6	7	8	9	10
11	12				16				20
				25					
31						37			40
41	42			45					
	52							59	
61		63		65					70
	72				76	77			80
	82			85			88		
		93						99	

75 pts.

Cross out all of the stars (☆).



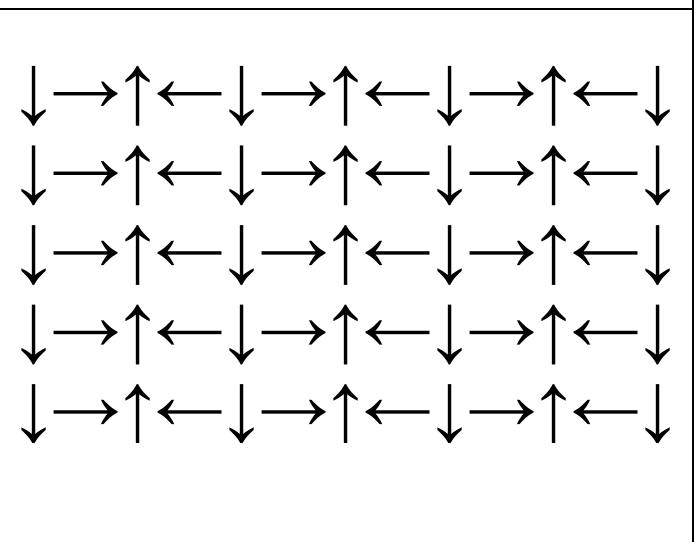
5 pts.

Solve the problems below.

$$\begin{array}{r} 5 \\ -2 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ -4 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ -7 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

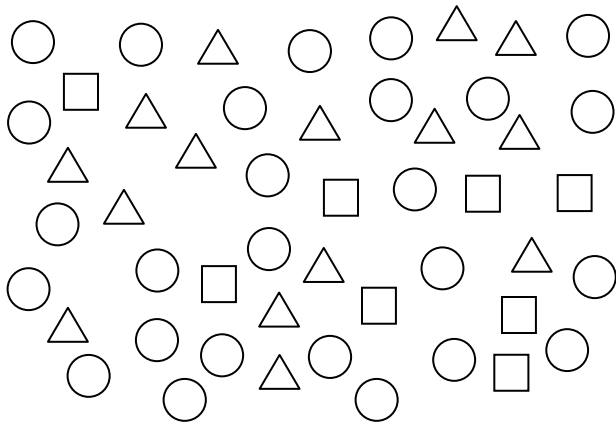
25 pts.

Circle all of the →.



10 pts.

Cross out all of the circles (○).



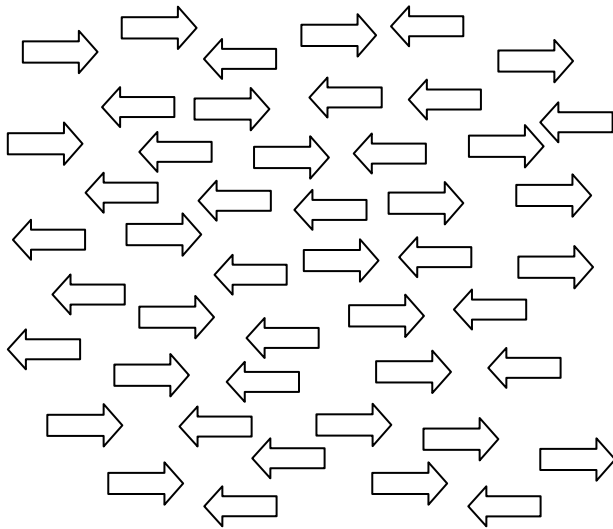
15 pts.

Fill in the missing numbers.

0	1	2	3	4	5	6	7	8	9
0	1				5				9
				4					
0						6			9
0	1						7		
	1							8	
0		2		4					9
	1				5	6			9
	1			4			7		9

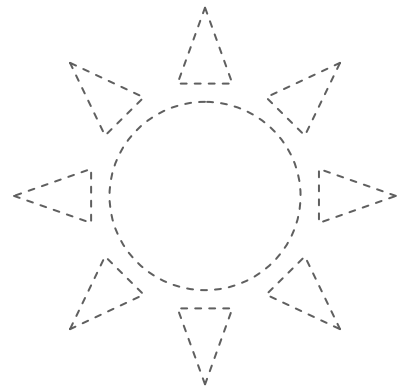
50 pts.

Circle the arrows pointing RIGHT (⇒).



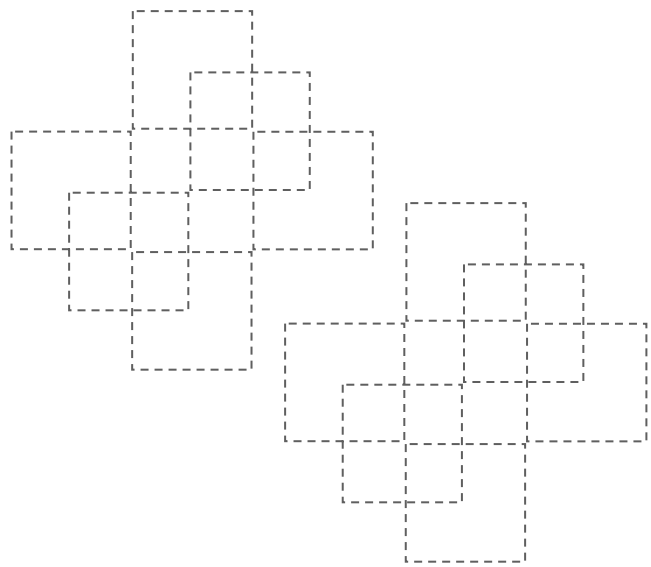
1 pt.

Trace the dotted lines.



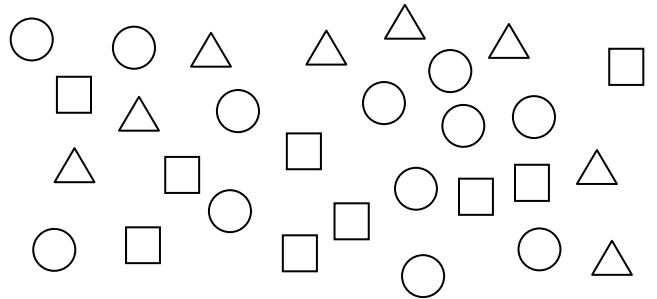
5 pts.

Trace the dotted lines.



10 pts.

How many circles (○)? _____



10 pts.

Fill in the empty boxes with the same symbol.

⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
⊗							
⊗							
⊗							
⊗							
⊗							

1 pt.

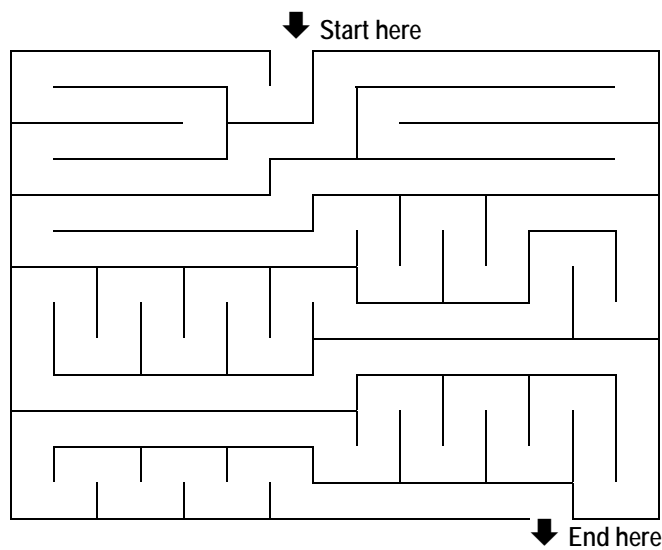
Solve the problems below.

6	9	8	9
<u>-3</u>	<u>-7</u>	<u>-2</u>	<u>-5</u>

7	8	4	3
<u>-4</u>	<u>-6</u>	<u>-4</u>	<u>-2</u>

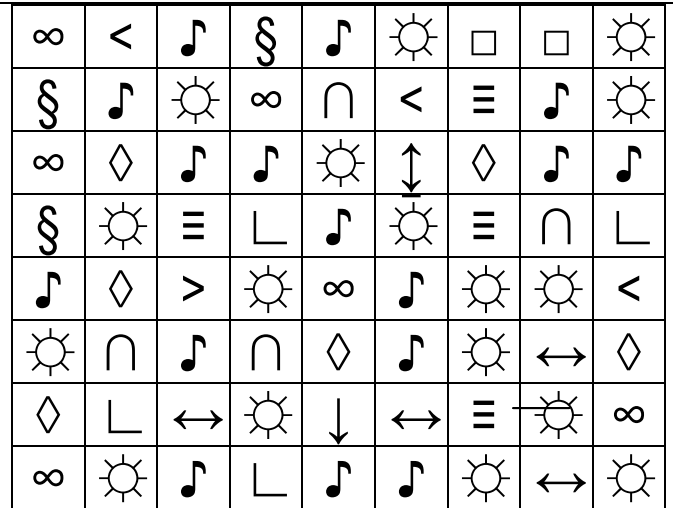
5 pts.

Complete the Maze.



5 pts.

Cross out all of the ♪ and ☀.



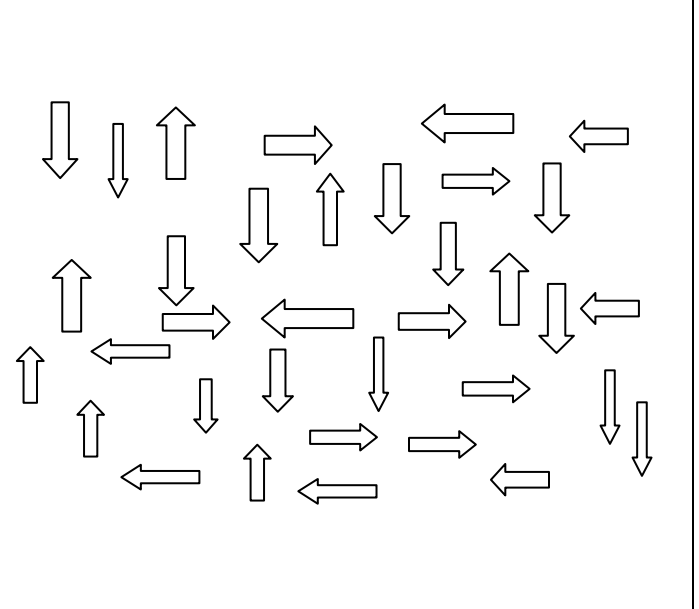
1 pt.

Cross out the letters M and N.

N	B	M	D	E	M	G	H	I	J
K	L	M	R	O	P	R	R	S	N
U	V	N	N	Y	Z	A	B	D	D
N	F	G	M	I	M	K	N	M	O
N	P	N	R	S	T	M	Y	W	X
Y	N	A	M	C	D	X	F	L	H
I	J	M	L	M	N	O	M	Q	R
S	T	M	V	W	N	Y	Z	A	B

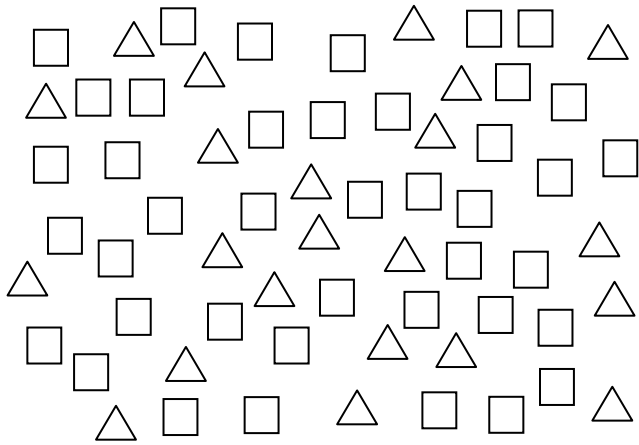
5 pts.

Circle the arrows pointing DOWN (↓).



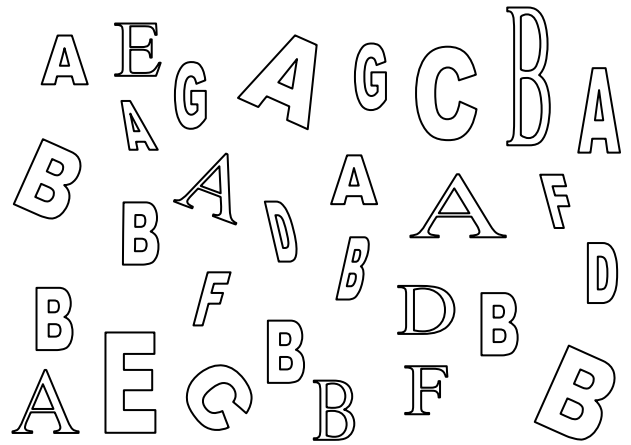
5 pts.

How many squares (□)? _____



1 pt.

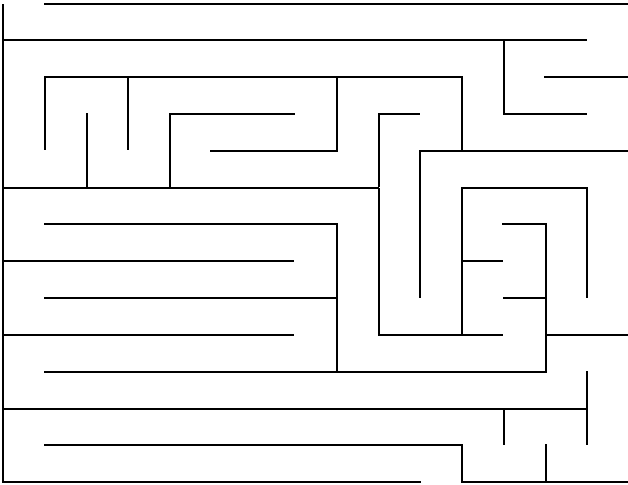
Circle the letters A and B.



1 pt.

Complete the maze.

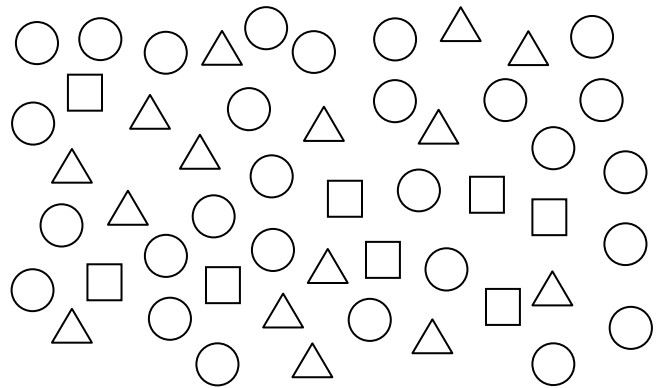
Start here



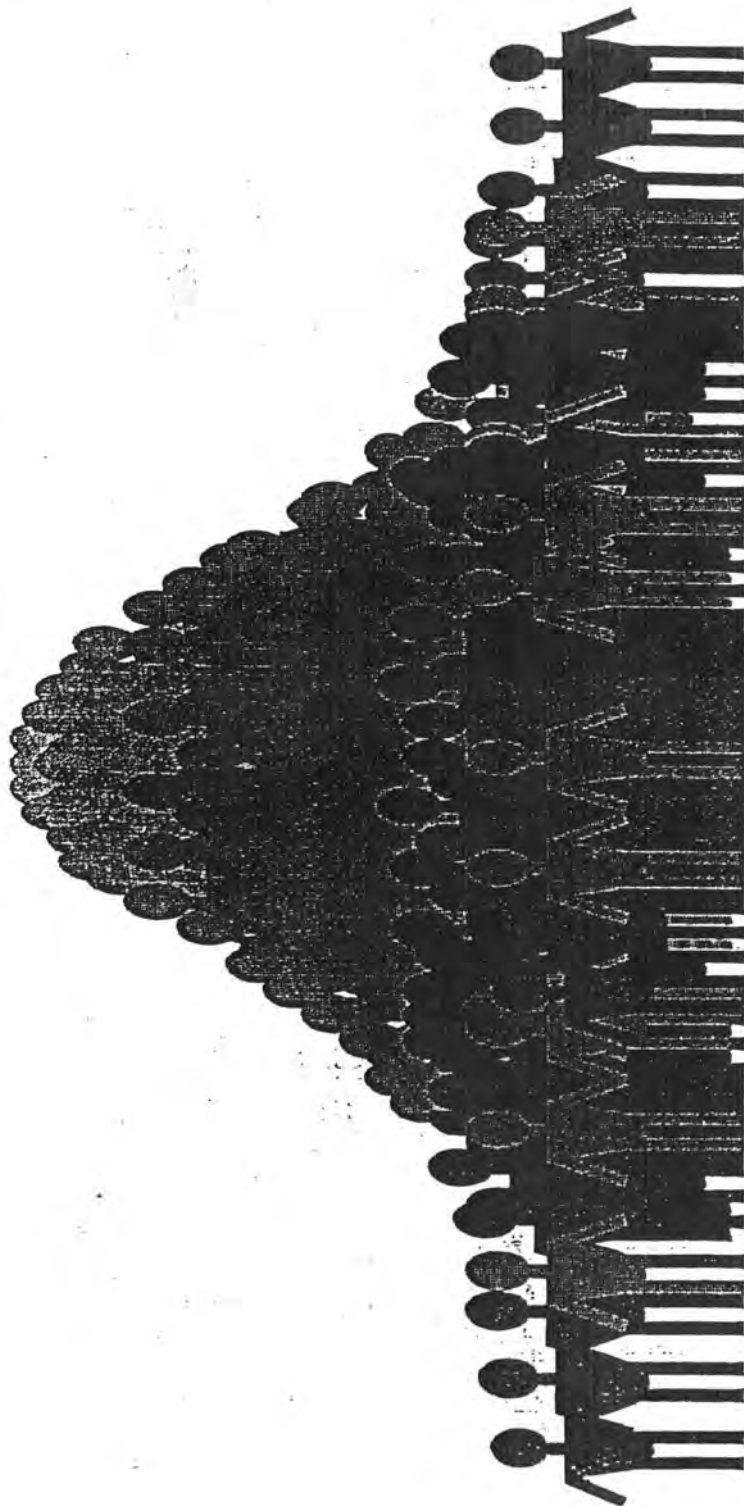
End here

5 pts.

Cross out the circles (○).



Normal Distribution



BEST

AVERAGE

WORST

1 2 3 4 5 6 7 8 10 13 16 19 23 25 27 32 39 50 55 63 73 77 84 87 92 95 97 99

better than 1,
99 did better
than you

better than 5,
95 did better
than you

better than 25,
75 did better
than you

better than 75,
25 did better
than you

better than 95,
5 did better
than you

better than 99,
1 did better
than you