

Mathematics Sample Questions

Student Name

Teacher Name

The intent of these sample test materials is to orient teachers and students to the types of questions on the Grade 4 – Grade 5 Math Assessment Modules. By using these materials, students will become familiar with the types of items and response formats they will see on the actual test.

Directions for Answering the Mathematics Sample Questions

Read each question carefully. Some questions may have more than one correct answer, and some questions may require you to grid in a response. Mark your answers on the Sample Student Answer Sheet. If you do not know how to work a problem, ask your teacher to explain it to you. Your teacher has the answers to these sample questions.

Calculators are NOT to be used with the sample questions or with the test questions on the Grade 4 – Grade 5 Math Assessment Modules.

Use the blank space provided with these sample questions to do your work, but be sure to mark your answers on the Sample Student Answer Sheet.

How to Complete the Response Grids



This symbol appears next to questions that require you to fill in your answers on a grid on the Answer Sheet. Directions for completing the Response Grid:

1. Work the problem and find an answer.
2. Write your answer in the answer boxes at the top of the grid.

For whole-number grids:

- Print your answer with the first digit in the answer box all the way to the left OR with the last digit in the answer box all the way to the right.
- Print only one digit in each answer box. Do NOT leave a blank answer box in the middle of an answer.

For decimal grids:

- Use the decimal point to decide where to start printing your answer.

3. Fill in a bubble under each answer box that you used to write your answer.
 - Fill in one and ONLY one bubble for each answer box. Do NOT fill in a bubble under an unused answer box.
 - Fill in each bubble by making a solid black mark that completely fills the circle.
 - You MUST fill in the bubbles accurately to receive credit for your answer.

Whole-Number Grid

$25 \times 5 =$

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

OR

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

Decimal Grid

$1.2 + 3.4 =$

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

Use the blank space in this Sample Test Booklet to do your work. Then mark the Sample Student Answer Sheet for the answer you have chosen.

1. What number is equal to 34 hundreds?

- A. 0.34
- B. 3.4
- C. 340
- D. 3,400

2. Which number is not a factor of 12 ?

- A. 24
- B. 12
- C. 3
- D. 1

3. Tyra has 3 more pennies than she has dimes. Let p represent the number of pennies she has. Which expression represents the number of dimes Tyra has?

- A. $p + 3$
- B. $p - 3$
- C. $p \times 3$
- D. $p \div 3$

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Use the following properties of shapes to answer numbers 4–7.

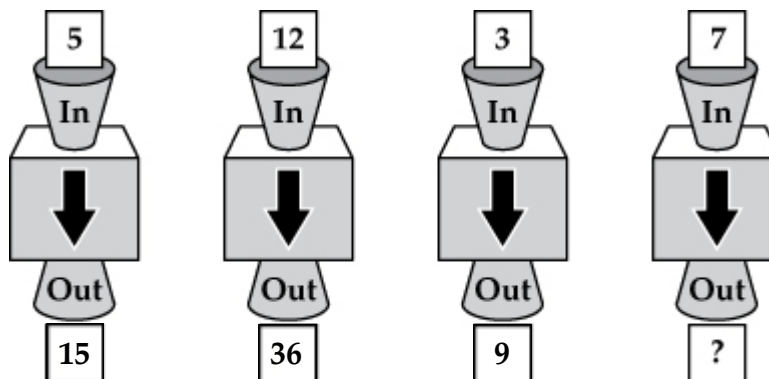
- The shape has exactly 4 sides.
- Opposite sides are congruent.
- Opposite angles are congruent.

For each shape named below, determine whether all three properties are always true for that type of shape.

- | | | | |
|----|---------------|---------|--------|
| 4. | Square | (Y) Yes | (N) No |
| 5. | Trapezoid | (Y) Yes | (N) No |
| 6. | Rectangle | (Y) Yes | (N) No |
| 7. | Parallelogram | (Y) Yes | (N) No |



8. A number machine applies the same rule to all numbers that are put into it. The picture below shows the numbers that came out of this number machine after three different numbers were put into it and the rule was applied.



What number should come out of this machine when 7 is put in and the rule is applied?



9. Of the five decimal numbers shown below, which number has the least value?

1.45

10.2

0.98

3.10

20.1

10. Luke worked the problem shown below. If there are mistakes in Luke's work, mark the letter that matches the Row in which a mistake first appears. If Luke made no mistake, mark the letter D.

$$\begin{array}{r} \overset{2}{2}3 \\ \times 49 \\ \hline 207 \\ + 920 \\ \hline 1127 \end{array}$$

Row 1



Row 2

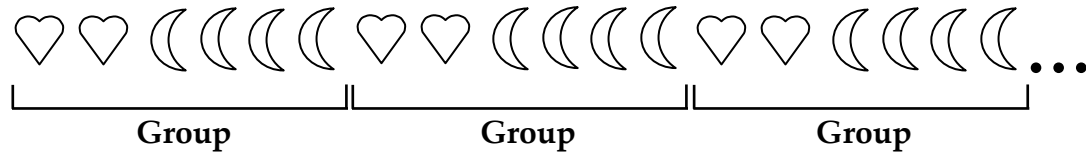
Row 3

- A. Row 1
- B. Row 2
- C. Row 3
- D. There is no mistake.
11. What is the measure, in degrees, of a right angle?



- A. 30°
- B. 45°
- C. 90°
- D. 180°

Use the following information to answer questions 12–14.

Juan is making a pattern by repeating groups of hearts  and moons  as shown in the picture below. The picture shows the first three groups of his pattern.



The table below shows the number of hearts and number of moons needed as the number of groups increases, but it is not complete. Juan plans to continue repeating this pattern until he has 10 groups of his pattern.

Number of Groups	Number of Hearts 	Number of Moons 
1	2	4
2	4	8
3	6	12
4		
⋮	⋮	⋮
10		

Based on Juan's pattern, determine whether each statement is True or False.

12. In 4 groups of Juan's pattern, there will be a total of 10 hearts. (T) True (F) False
13. In 10 groups of Juan's pattern, there will be a total of 20 hearts. (T) True (F) False
14. In each group, the number of moons is 4 times the number of hearts. (T) True (F) False