

Wisconsin WFE Grade 3 Math Practice

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WISCONSIN DEPARTMENT OF
Public Instruction

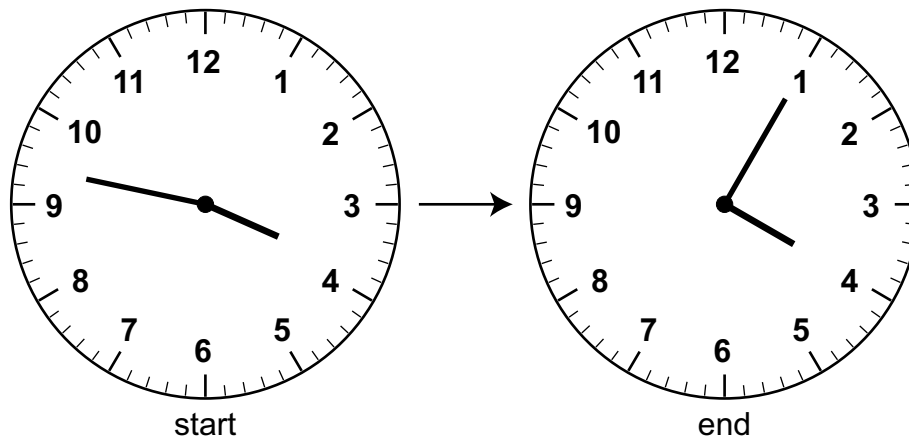
Mathematics Item Sampler Grade 3



Answer the items below.

1. Jasmine went for a run after school. The clocks show the time she started and ended her run.

Jasmine's Run



How long did Jasmine run?

- A. 18 minutes
- B. 42 minutes
- C. 78 minutes
- D. 102 minutes

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2. Andy needs to find the value of n in the division equation shown.

$$n \div 9 = 3$$

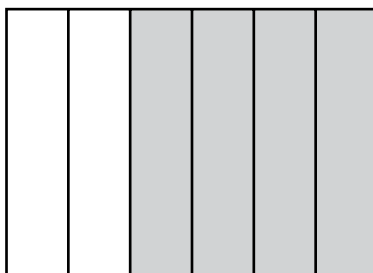
Determine whether Andy could use each of the multiplication equations in the table to find the value of n .

	Yes	No
$n \times 3 = 9$		
$3 \times 9 = n$		
$n \times 9 = 3$		
$9 \times 3 = n$		

3. What is $604 - 286$?

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4. A figure is shown.

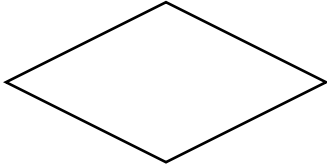
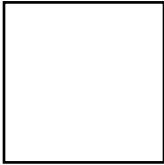
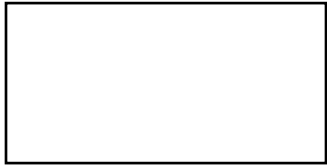


Which fraction represents the shaded area of the figure?

- A. $\frac{2}{6}$
- B. $\frac{2}{4}$
- C. $\frac{4}{6}$
- D. $\frac{4}{2}$

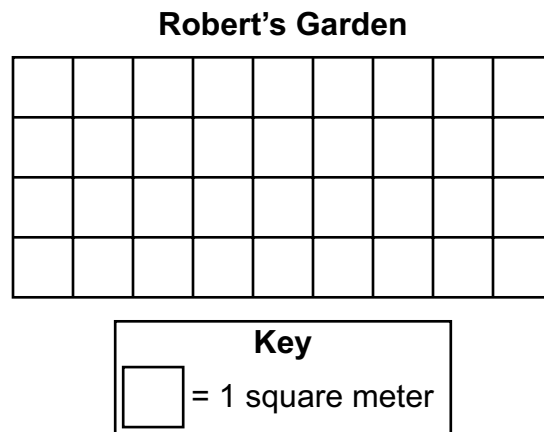
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5. Three shapes are shown in the table. Determine whether each shape is a rhombus, a rectangle, and/or a quadrilateral. Be sure to select **all** of the names that describe each shape.

	Rhombus	Rectangle	Quadrilateral
			
			
			

Go on to the next page.

6. A diagram of Robert's garden is shown.



What is the area, in square meters, of Robert's garden?

- A. 13
 - B. 26
 - C. 36
 - D. 40
7. There are 48 students signed up for swimming lessons. The teacher splits the students into 8 equal groups. Which expression could the teacher use to find the number of students in each group?
- A. $48 + 8$
 - B. $48 - 8$
 - C. 48×8
 - D. $48 \div 8$

Go on to the next page.

8. Ben and Gini each drew a rectangle on the sidewalk with chalk. Each person's rectangle is the same size. Ben colored in $\frac{4}{6}$ of his rectangle. Gini colored in the same amount of her rectangle, as shown.

Ben's Rectangle



Gini's Rectangle



What fraction equivalent to $\frac{4}{6}$ represents the shaded part of Gini's whole rectangle?

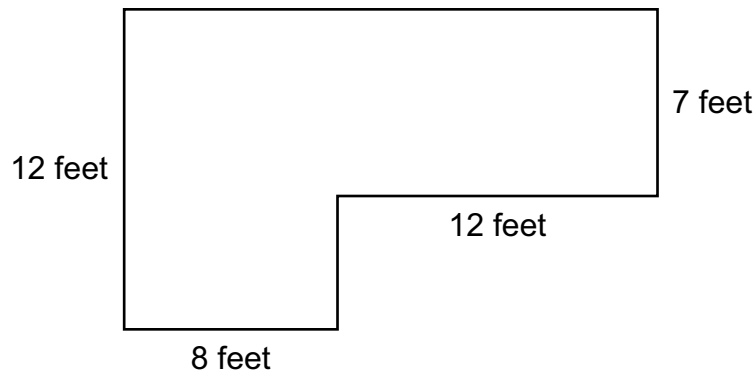


STOP.

Answer the items below.

1. Tom is putting a fence around his garden. A diagram of Tom's garden is shown.

Tom's Garden



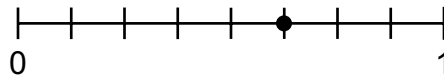
How many feet of fencing does Tom need for his garden?

- A. 39
- B. 44
- C. 59
- D. 64

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2. There are 6 bookshelves in Miss Miller's classroom. Each bookshelf has 60 books on it. How many books are on the bookshelves in Miss Miller's classroom?

3. A number line is shown.

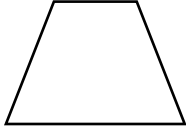
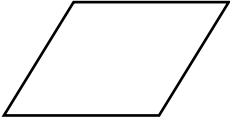
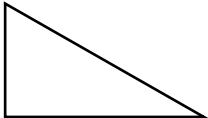


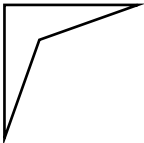


Which fraction represents the point on the number line?

- A. $\frac{3}{7}$
- B. $\frac{3}{8}$
- C. $\frac{5}{7}$
- D. $\frac{5}{8}$

Go on to the next page.

4. Determine whether each figure is a quadrilateral or is not a quadrilateral.

	Quadrilateral	Not a Quadrilateral
		
		
		
		
		
		

Go on to the next page.

5. Clara brings 5 boxes of cupcakes to school. Each box contains the same number of cupcakes. There are 3 cupcakes remaining after Clara shares 27 cupcakes with her classmates. How many cupcakes were in each of the boxes Clara brought to school?
- A. 6
 - B. 8
 - C. 15
 - D. 30
6. There are 185 books on a bookshelf. Rounded to the nearest ten, how many books are on the bookshelf?
- A. 100
 - B. 180
 - C. 190
 - D. 200

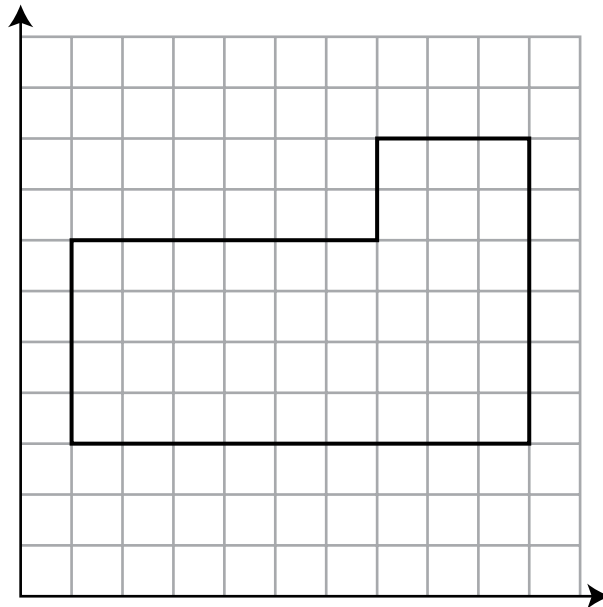
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7. Henry draws the shape of his classroom floor on a grid. He divides the shape into 2 rectangles. He then writes the expression shown to find the area of the shape, in square units.

$$(4 \times 6) + (6 \times 3)$$

Draw a line on the grid to divide the shape into Henry's 2 rectangles.

Henry's Classroom Floor





STOP.

SUMMARY DATA

Grade 3

Sample Number	Alignment	Answer Key	Depth of Knowledge	Annotations
Session 1				
1	3.MD.1	A	2	<p>The question asks the student to tell an interval of time.</p> <p>A. Correct. The student adds 18 minutes from the start time to the end time.</p> <p>B. Incorrect. The student subtracts 5 from 47.</p> <p>C. Incorrect. The student adds an extra hour.</p> <p>D. Incorrect. The student adds an extra hour and subtracts 5 from 47.</p>
2	3.OA.6	See Annotations	2	<p>The question asks the student to rewrite a division equation as a multiplication equation.</p> <p>To receive full credit, the student must choose No, Yes, No, Yes.</p>
3	3.NBT.2	Exemplar: 318	1	<p>The question asks the student to find the difference between two numbers.</p> <p>To receive full credit, the student must enter 318 or an equivalent value.</p>

Grade 3

Sample Number	Alignment	Answer Key	Depth of Knowledge	Annotations
4	3.NF.1	C	1	<p>The question asks the student to use a model to show a fraction.</p> <p>A. Incorrect. The student chooses a fraction that shows the unshaded area.</p> <p>B. Incorrect. The student estimates the shaded area.</p> <p>C. Correct. The student chooses a fraction that shows the 4 shaded parts out of the 6 total parts.</p> <p>D. Incorrect. The student compares the shaded parts to the parts not shaded.</p>
5	3.G.1	See Annotations	2	<p>The question asks the student to match shapes.</p> <p>To receive full credit, the student must choose Rhombus and Quadrilateral for the first shape; Rhombus, Rectangle, and Quadrilateral for the second shape; and Rectangle and Quadrilateral for the third shape.</p>
6	3.MD.6	C	1	<p>The question asks the student to find the area of a rectangle.</p> <p>A. Incorrect. The student adds the length and width.</p> <p>B. Incorrect. The student finds the perimeter of the rectangle.</p> <p>C. Correct. The student adds the unit cubes inside the rectangle.</p> <p>D. Incorrect. The student finds the area by using a 4 by 10 rectangle.</p>

Grade 3

Sample Number	Alignment	Answer Key	Depth of Knowledge	Annotations
7	3.OA.2	D	2	<p>The question asks the student to write an expression to find the number of groups.</p> <p>A. Incorrect. The student adds the two numbers.</p> <p>B. Incorrect. The student subtracts the two numbers.</p> <p>C. Incorrect. The student multiplies the two numbers.</p> <p>D. Correct. The student divides the two numbers.</p>
8	3.NF.3a	Exemplar: $\frac{2}{3}$	1	<p>The question asks the student to find an equivalent fraction using models.</p> <p>To receive full credit, the student must enter $\frac{2}{3}$.</p>
Session 2				
1	3.MD.8	D	2	<p>The question asks the student to find the perimeter of a garden.</p> <p>A. Incorrect. The student adds the measurements in the diagram.</p> <p>B. Incorrect. The student adds the measurements in the diagram and the missing side length of 5 feet.</p> <p>C. Incorrect. The student adds the measurements in the diagram and the missing side length of 20 feet.</p> <p>D. Correct. The student adds the measurements in the diagram and the missing side lengths of 20 feet and 5 feet.</p>

Grade 3

Sample Number	Alignment	Answer Key	Depth of Knowledge	Annotations
2	3.NBT.3	Exemplar: 360	2	<p>The question asks the student to find the total number of books given the number of books in each group.</p> <p>To receive full credit, the student must enter 360 or an equivalent value.</p>
3	3.NF.2b	D	1	<p>The question asks the student to show the location of a fraction on a number line.</p> <p>A. Incorrect. The student counts the number of tick marks from 1 as the numerator and the number of tick marks between 0 and 1 as the denominator.</p> <p>B. Incorrect. The student counts the number of tick marks from 1 as the numerator.</p> <p>C. Incorrect. The student counts the number of tick marks between 0 and 1 for the denominator.</p> <p>D. Correct. The student counts the number of tick marks after 0 as the numerator, and the total number of tick marks after 0 and to 1 as the denominator.</p>
4	3.G.1	See Annotations	2	<p>The question asks the student to classify shapes as a quadrilateral or not a quadrilateral.</p> <p>To receive full credit, the student must choose Quadrilateral, Quadrilateral, Not a Quadrilateral, Quadrilateral, Not a Quadrilateral, and Quadrilateral.</p>

Grade 3

Sample Number	Alignment	Answer Key	Depth of Knowledge	Annotations
5	3.OA.8	A	2	<p>The question asks the student to solve a word problem.</p> <p>A. Correct. The student adds 27 plus 3 and divides the sum by 5.</p> <p>B. Incorrect. The student adds 5 and 3.</p> <p>C. Incorrect. The student multiplies 5 and 3.</p> <p>D. Incorrect. The student adds 27 and 3.</p>
6	3.NBT.1	C	1	<p>The question asks the student to round a number to the nearest ten.</p> <p>A. Incorrect. The student rounds down to the nearest hundred.</p> <p>B. Incorrect. The student rounds down to the nearest ten.</p> <p>C. Correct. The student rounds up to the nearest ten.</p> <p>D. Incorrect. The student rounds up to the nearest hundred.</p>
7	3.MD.7d	See Annotations	2	<p>The question asks the student to make rectangles from a given shape.</p> <p>To receive full credit, the student must draw a line inside the floor diagram to make a 4×6 rectangle and a 6×3 rectangle.</p>