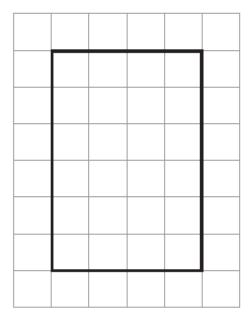
Grade 5 Math Authentic OAT Questions

Measurement Standard

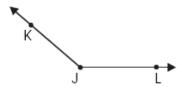
Joe is putting a low fence around all four sides of a rectangular flower bed.
The flower bed is 4 feet wide and 6 feet long.



Each section of fencing is 2 feet long. How many sections of fencing will Joe need?

- A. 10 sections
- B. 20 sections
- C. 24 sections
- D. 40 sections

2. Angle KJL is shown.



Use your protractor to find the measure of angle KJL.

- A. 60°
- B. 80°
- C. 140°
- D. 160°
- 3. Bob covered a floor with carpet.

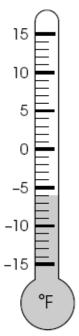
Which unit of measure describes how much carpet he used?

- A. inches
- B. feet
- C. square feet
- D. cubic inches
- 4. Justin keeps his toys in a box like the one shown.



On a separate piece of paper, explain the difference between the volume and the surface area of the box. (2 points)

5. Mary checked the outside temperature.



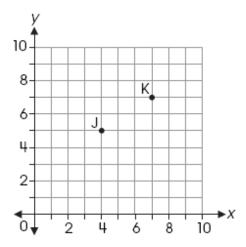
What temperature is shown on the thermometer?

- A. -6°F
- B. -4°F
- C. 4°F
- D. 6°F
- 6. A pickup truck weighs 3 tons.

How many pounds does the truck weigh?

- A. 600 pounds
- B. 2,000 pounds
- C. 3,000 pounds
- D. 6,000 pounds

7. Point J and point K are shown on the grid.



What is the direction from point J to point K along the grid lines?

- A. 3 units right and 2 units up
- B. 3 units right and 3 units up
- C. 4 units right and 3 units up
- D. 4 units right and 2 units up

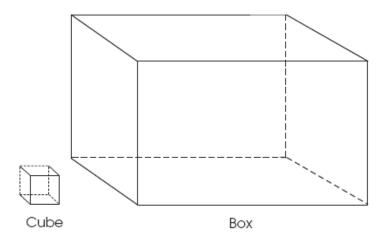
8. Peter's goal is to read 5 hours every school week. He reads every evening during the school week and records his time in the chart shown.

Peter's Reading Time

Day	Time Read
Monday	30 minutes
Tuesday	1 hour 15 minutes
Wednesday	1 hour 5 minutes
Thursday	40 minutes
Friday	?

In your **Answer Document**, determine how much time Peter should read on Friday to meet his goal. Show or explain how you found your answer. (2 points)

9. Carlos wants to know how many small cubes will fit in the box.



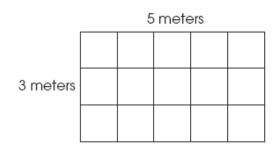
Which measurement of the box is Carlos finding when he fills it with cubes?

- A. the area of the box
- B. the length of the box
- C. the surface area of the box
- D. the volume of the box
- After swim practice, each of the 30 swim team members gets 8 ounces of juice. The coach brought 2 gallons of juice to practice.

On a separate piece of paper, determine whether the coach brought enough juice for each team member to get 8 ounces. Show work to support your answer. (2 points)

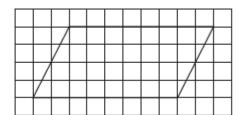
- 11. Carla hiked for $2\frac{1}{2}$ hours. How many minutes did she hike?
 - A. 30 minutes
 - B. 60 minutes
 - C. 120 minutes
 - D. 150 minutes

12. The dimensions of Mike's garden are shown.



Which expression shows how Mike could find the number of square meters in his garden?

- A. 3 + 5
- B. 3 × 5
- C. 3+5+3+5
- D. $3 \times 5 \times 3 \times 5$
- 13. A parallelogram is shown on the grid.

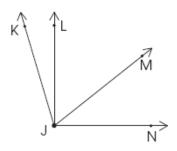


= 1 unit

Which expression represents the area of this parallelogram?

- A. 6 + 6 + 4 + 4
- B. 8 + 8 + 4 + 4
- $C.\ 6\cdot 4$
- D. 8 · 4

14. Han compared the angles on this diagram.



Which angle appears to be greater than 90°?

- A. ∠LJN
- B. ∠MJN
- C. ∠KJM
- D. ZKJN

15. Julia ran a 6-kilometer race on a 400-meter oval track.

How many laps around the track did Julia run?

- A. 0.15 lap
- B. 1.5 laps
- C. 15 laps
- D. 150 laps

16. A florist sells roses in bunches of 12. He sold four bunches and has 36 roses left at the end of the day.

Which expression represents the number of roses he had at the beginning of the day?

- A. 4 + 12 + 36
- B. 4 × 12 + 36
- C. 4 + 12 36
- D. 4 × 12 36