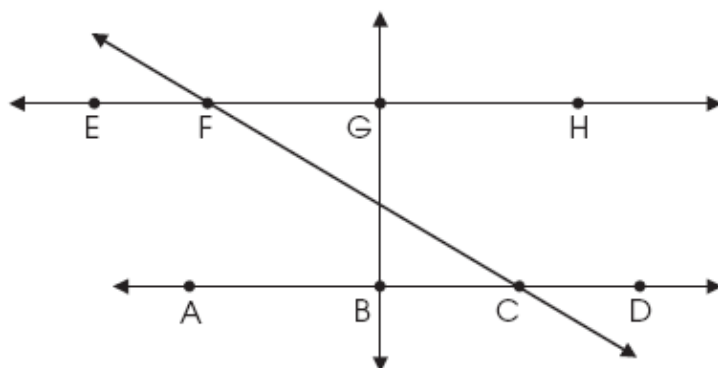


Grade 5 Math Authentic OAT Questions

Geometry and Spatial Sense Standard

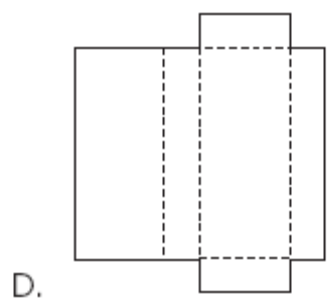
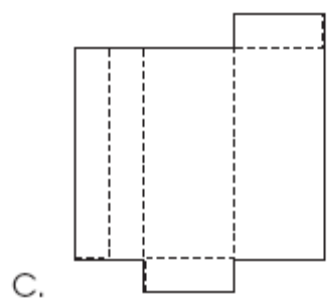
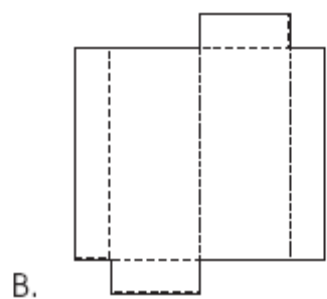
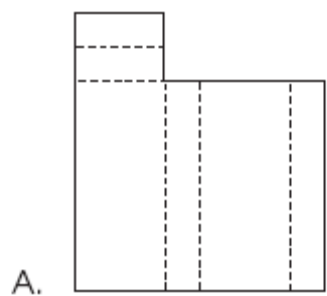
1. Four lines are drawn as shown.



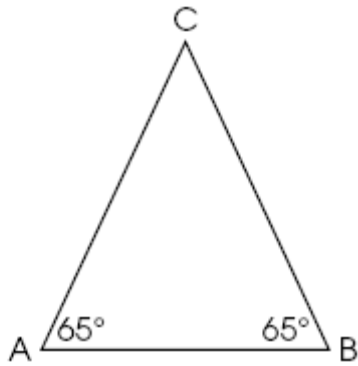
Which statement appears to be true of the two lines that intersect at point G?

- A. They are rays.
- B. They are skew.
- C. They are parallel.
- D. They are perpendicular.

2. Which figure shows the net for a rectangular prism?

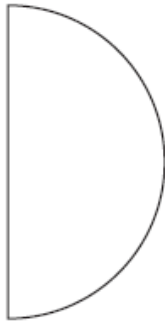


3. Triangle ABC is shown.



What is the measure of angle C?

- A. 50°
 - B. 65°
 - C. 90°
 - D. 180°
4. Malcolm needed to measure the distance across a circular tablecloth. He folded the tablecloth in half as shown.

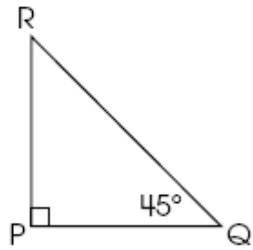


Malcolm measured the length of a folded side.

Which part of the circular tablecloth did Malcolm measure?

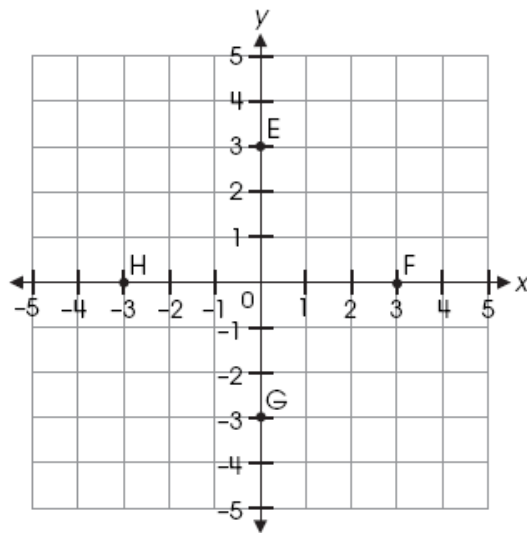
- A. center
- B. circumference
- C. diameter
- D. radius

5. Triangle PQR is a right triangle.



What is the measure of angle R?

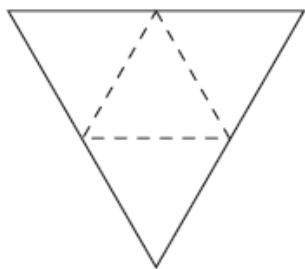
- A. 30°
 - B. 45°
 - C. 75°
 - D. 90°
6. Four points are shown on the coordinate plane.



Which point is located at $(0, -3)$?

- A. E
- B. F
- C. G
- D. H

7. A net of a three-dimensional shape is shown.

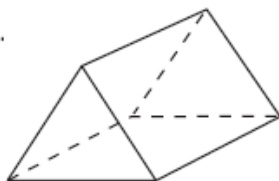


Which three-dimensional shape can be made from the net?

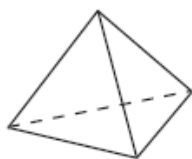
A.



B.



C.



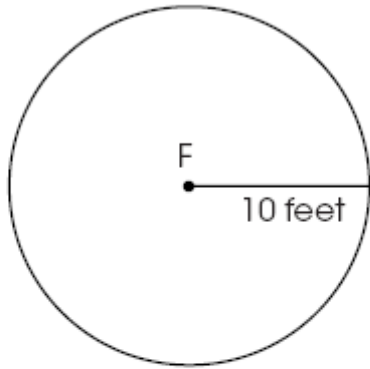
D.



尺

8. On a separate piece of paper, draw an obtuse angle. Use your protractor give the measure of the obtuse angle. (2 points)

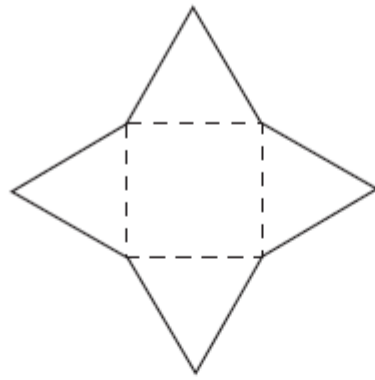
9. Point F is the center of the circle shown.



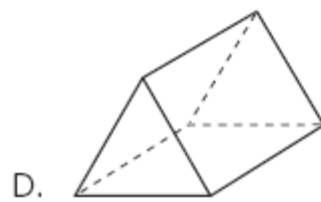
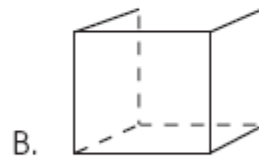
What is the diameter of this circle?

- A. 10 feet
- B. 20 feet
- C. 30 feet
- D. 100 feet

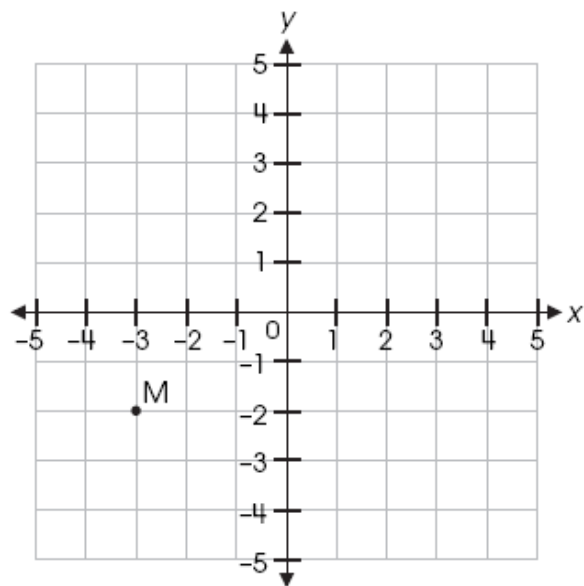
10. Darran made this net of a shape.



Which three-dimensional shape can he make from the net?



11. Point M is shown on the coordinate grid.



Which ordered pair represents point M?

- A. $(-3, -2)$
 - B. $(-3, 2)$
 - C. $(3, -2)$
 - D. $(3, 2)$
12. A rectangle is shown.



What is the sum of the interior angles of this figure?

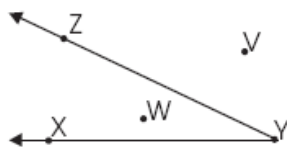
- A. 90°
- B. 180°
- C. 270°
- D. 360°

13. A circular table has a circumference of 18 feet.

What is a reasonable approximation for the diameter of the table?

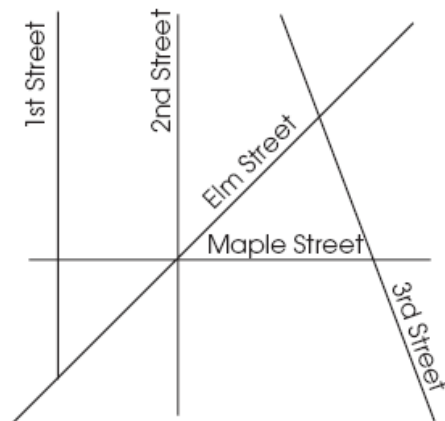
- A. 6 feet
- B. 9 feet
- C. 12 feet
- D. 21 feet

14. Angle XYZ is shown.



Which point lies in the interior of angle XYZ?

- A. point V
 - B. point W
 - C. point X
 - D. point Y
15. A street map is shown.

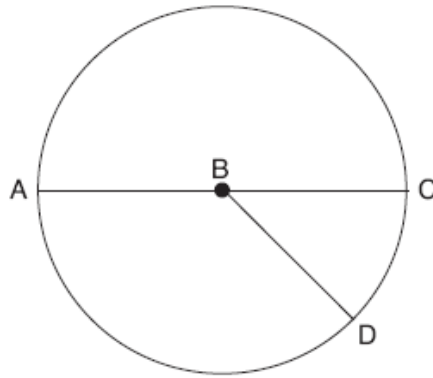


Susan lives on 1st Street. Her friend Allison lives on a street that is parallel to 1st Street.

On which street could Allison live?

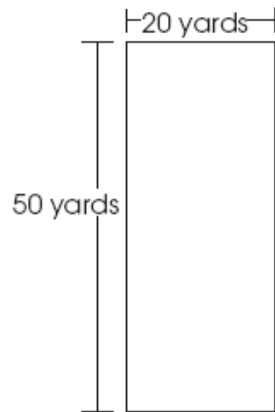
- A. 3rd Street
- B. Elm Street
- C. 2nd Street
- D. Maple Street

16. A circle is shown.



Which statement about the circle is true?

- A. The diameter is \overline{AB} .
 - B. The diameter is \overline{AC} .
 - C. The only radius is \overline{BD} .
 - D. The radius is two times the length of \overline{BC} .
16. Joel's field is 20 yards wide and 50 yards long, as shown.



He wants to divide his field into two congruent rectangular fields, one for corn and the other for strawberries.

On a separate piece of paper, determine the length and the width of the two new fields.

Explain how you know that the two new fields are congruent. (2 points)