

CAHSEE MG Quiz**Multiple Choice**

Identify the choice that best completes the statement or answers the question.

1. How many centimeters are in 11 meters?

A 11
B 100
C 110
D 1,100

2. Grace reads 9 pages every 5 minutes. How long will it take Grace to read a book that is 81 pages long?

A 0.5 hour
B 0.75 hour
C 1 hour
D 1.25 hours

3. Monica can run 40 yards in 7 seconds. At that rate, how long would it take Monica to run 200 yards?

A 35 seconds
B 49 seconds
C 72 seconds
D 200 seconds

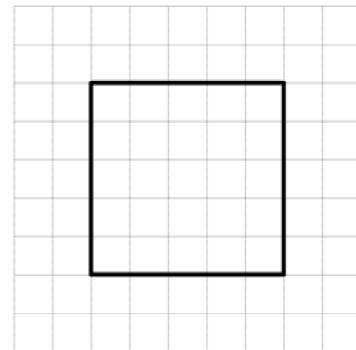
4. Sam is building a model airplane. The scale from the model to the actual airplane is 1 in.:20 ft. If the actual airplane is 200 feet, how long is the model?

A 5 inches
B 10 inches
C 20 inches
D 25 inches

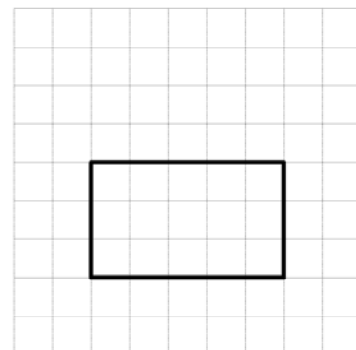
5. The key on a map is 1 inch:50 miles. On the map, the distance between San Francisco and Los Angeles is 9 inches. How many miles apart are the two cities?

A 400
B 450
C 475
D 500

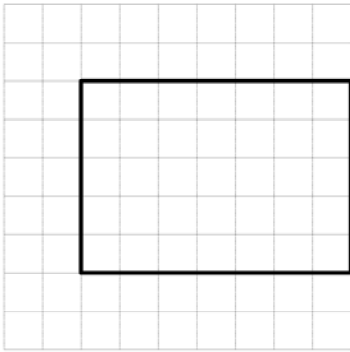
6. Tara is drawing a picture of her room. The dimensions of her room are 10 feet by 14 feet. Which of the following drawings would represent her room if one square equals 2 feet?



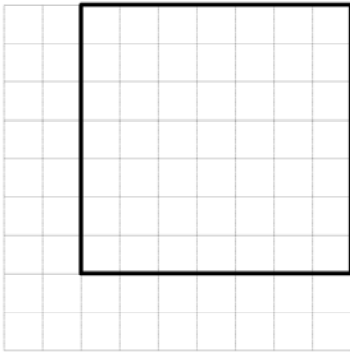
A



B



C



D

7. Lisa is comparing three cars. Car A gets 34 miles per gallon. Car B can travel 480 miles on 15 gallons of gas. Car C can travel 70 miles on 2 gallons of gas. Which car gets the best gas mileage?

A Car A
B Car B
C Car C
D all three have the same mileage

8. A local amusement park had an average of 5,500 visitors per day. What was the average number of visitors in a week?

A 11,000
B 27,500
C 30,000
D 38,500

9. Which of the following answers could *not* be the speed of an object?

A 17 mi per hr
B 8 ft per sec
C 25 customers per day
D 50 km per hr

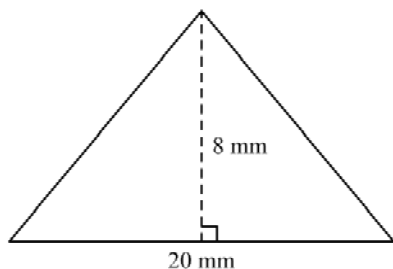
10. It takes a company 4 man-hours to finish an assignment. How many assignments can a 2-person crew finish in 12 hours?

A 6
B 8
C 12
D 24

11. What is the perimeter of a rectangle with a length of 9 cm and a width of 15 cm?

A 24 cm
B 48 cm
C 72 cm
D 135 cm

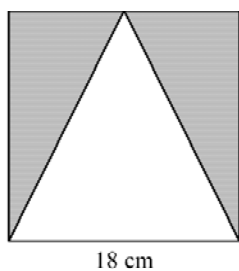
12. What is the area of the triangle below?



- A 60 mm^2 C 120 mm^2
B 80 mm^2 D 160 mm^2
13. Find the volume of a rectangular prism with dimensions of 7 ft, 10 ft and 5 ft.

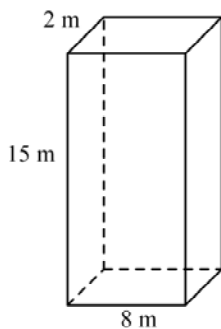
- A 175 ft^3 C 350 ft^3
B 310 ft^3 D 450 ft^3

14. Jim drew a triangle in a square as shown below. What is the area of the shaded region?



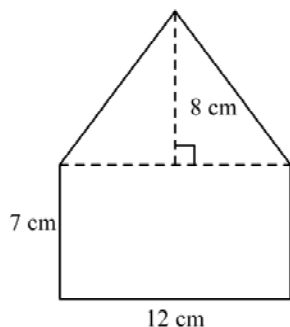
- A 81 cm^2 C 224 cm^2
B 162 cm^2 D 324 cm^2

15. Find the volume of the figure shown below.



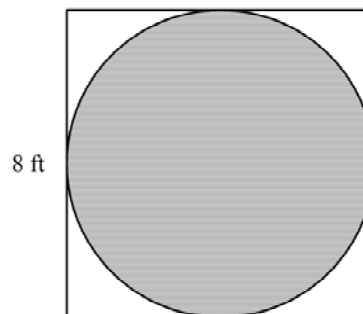
- A 136 m^3
- B 240 m^3
- C 380 m^3
- D $5,760 \text{ m}^3$

16. Find the area of the figure below.



- A 90 cm^2
- B 132 cm^2
- C 140 cm^2
- D 180 cm^2

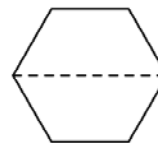
17. A circle is inscribed in a square as shown below.



What is the total area of the unshaded regions rounded to the nearest tenth? Use 3.14 for π .

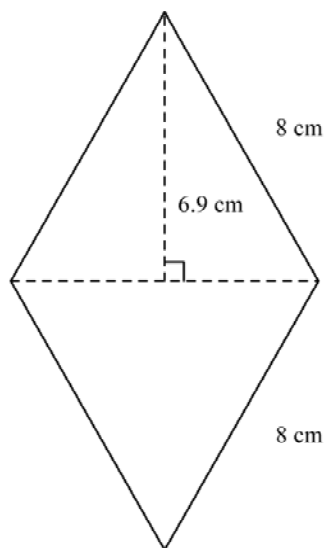
- A 13.8 ft^2
- B 16 ft^2
- C 27.6 ft^2
- D 68.5 ft^2

18. What two figures together form the hexagon below?



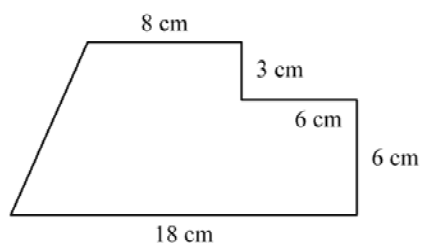
- A two triangles
- B two squares
- C two trapezoids
- D two rectangles

19. Erin put two equilateral triangles together as shown below.



What is the approximate area of the figure?

- A 55.2 m²
 - B 64 m²
 - C 95.2 m²
 - D 110.4 m²
20. Find the area of the figure below.

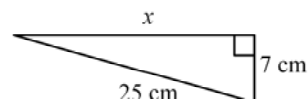


- A 96 cm²
- B 126 cm²
- C 144 cm²
- D 152 cm²

21. Which statement *best* describes congruent figures?

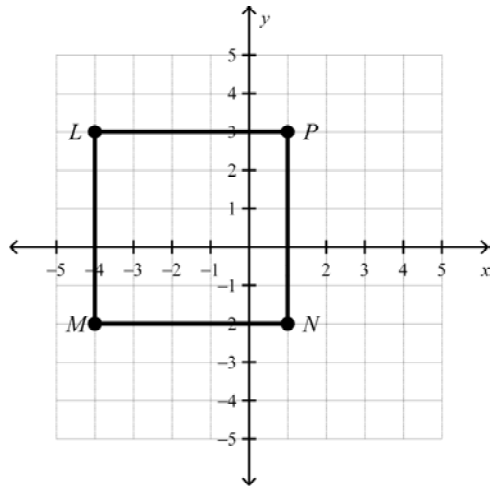
- A same shape
- B same size and shape
- C same perimeter
- D same area

22. What is the measure of the missing side in the right triangle below?



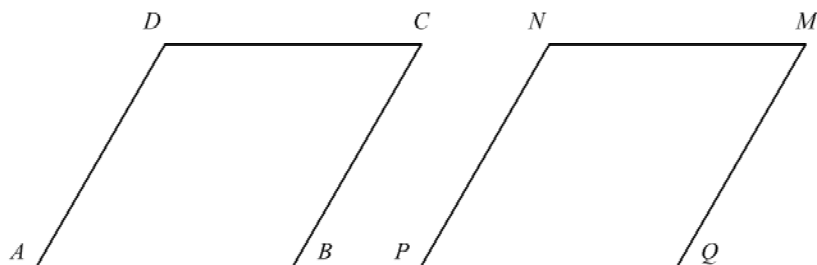
- A 14 cm
 - B 18 cm
 - C 22 cm
 - D 24 cm
23. If $\triangle HJK \cong \triangle MNP$, what angle is congruent to $\angle J$?
- A $\angle M$
 - B $\angle N$
 - C $\angle P$
 - D $\angle H$

Square $LMNP$ is graphed below.



24. What are the coordinates of M ?
- A $(1, -2)$
 - B $(-2, -4)$
 - C $(-4, 3)$
 - D $(-4, -2)$
25. What is the area of $LMNP$?
- A 5 units²
 - B 12.5 units²
 - C 20 units²
 - D 25 units²
26. If point P is reflected over the x -axis, what are the new coordinates of point P ?
- A $(1, -2)$
 - B $(-3, 1)$
 - C $(1, -3)$
 - D $(-1, 3)$
27. Angie knows the length of two legs of a right triangle are 5 cm and 12 cm. What is the length of the hypotenuse of the triangle?
- A 5 cm
 - B 12 cm
 - C 13 cm
 - D 17 cm
28. Which of the following equations represents the Pythagorean theorem?
- A $A = bh$
 - B $a^2 + b^2 = c^2$
 - C $A = \frac{1}{2}bh$
 - D $a^2 - b^2 = c^2$

29. In the figure below, quadrilateral $ABCD$ is congruent to quadrilateral $PQMN$.



What side is congruent to \overline{MN} ?

- | | |
|-------------------|-------------------|
| A \overline{AB} | C \overline{AB} |
| B \overline{BC} | D \overline{CD} |
30. Rashed knows that two squares are congruent. He knows the perimeter of one square is 36 inches. What is the length of a side in the other square?
- | | |
|---------|----------|
| A 6 in. | C 12 in. |
| B 9 in. | D 18 in. |