TEST NAME: Unit 4 EOG Test

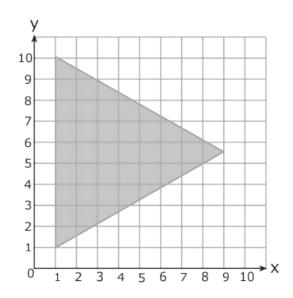
TEST ID: 1499291

GRADE: 06 - Sixth Grade

SUBJECT: Mathematics

 ${\sf TEST\ CATEGORY: My\ Classroom}$

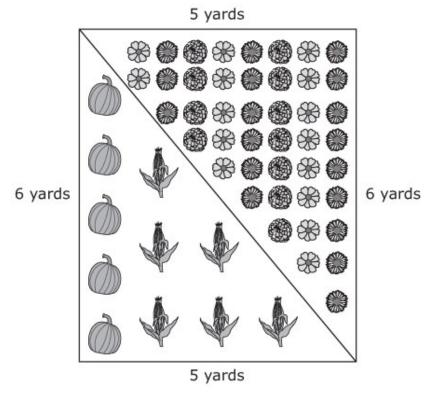
- What is the area of a parallelogram with a length of 12.8 ft and a height of 7.4 ft?
 - A 20.20 ft²
 - B. 40.40 ft²
 - C. 54.76 ft²
 - D. 94.72 ft²
- 2. What is the area of the shaded figure?



- A 22 units²
- B. 36 units²
- C. 40 units²
- D. 45 units²

3. Chris is planting a vegetable garden and a flower garden. Each garden is in the shape of a right triangle.

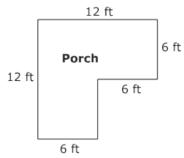
The picture shows the dimensions of the two gardens.



What is the total area that Chris will use for his two gardens?

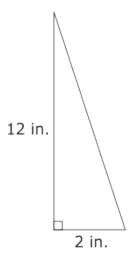
- A 22 square yards
- B. 30 square yards
- c. 60 square yards
- D. 120 square yards
- 4. An equilateral triangle has a perimeter of 42 inches. The height measures 12 inches. What is the area of the triangle?
 - A 84 inches²
 - B. 168 inches²
 - C. 252 inches²
 - D. 504 inches²

5. The Wilsons want to put outdoor carpet on their porch.



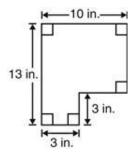
How much carpet will be needed for their porch?

- A 42 ft²
- B. 72 ft²
- C. 108 ft²
- D. 144 ft²
- 6. What is the area of the triangle below?



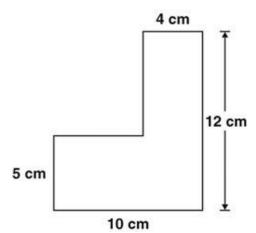
- A 12 in.²
- B. 14 in.²
- c. 24 in.²

7. What is the area of the figure below?



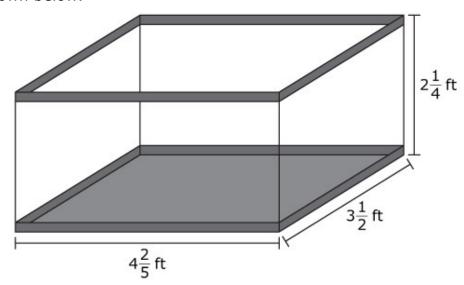
- A 109 in.²
- B. 100 in.²
- C. 90 in.²
- D. 46 in.²

8. What is the area of this figure?



- $A 31 cm^2$
- B. 78 cm²
- C. 98 cm²
- D. 120 cm²

^{9.} Elyssa bought a rectangular aquarium. The measurements, in feet (ft), are shown below.

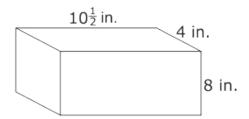


How much water will it take to fill the aquarium?

- A $10\frac{3}{20}$ cubic feet
- B. $15\frac{8}{20}$ cubic feet
- C. $24\frac{1}{20}$ cubic feet
- D. $34\frac{13}{20}$ cubic feet

10.

What is the volume of the right rectangular prism below?



- A $22\frac{1}{2}$ in.³
- B. $67\frac{1}{2}$ in.³
- ^{C.} 336 in.³
- D. 672 in.³

^{11.} What is the volume of a right rectangular prism that measures $4\frac{1}{2}$ inches long, 3 inches wide, and 6 inches high?

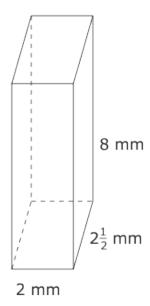
- A $7\frac{1}{2}$ inches³
- B. $13\frac{1}{2}$ inches³
- C. 72 inches³
- D. 81 inches³

- Samantha bought a refrigerator that is $3\frac{1}{2}$ feet wide, $5\frac{1}{2}$ feet tall, and $2\frac{1}{2}$ feet deep. How much space will the new refrigerator occupy?
 - A $30\frac{1}{8}$ ft³
 - B. $48\frac{1}{8}$ ft³
 - C. $83\frac{1}{2}$ ft³
 - D. $192\frac{1}{2}$ ft³
- 13. LaTisha used a box in the shape of a rectangular prism to mail a package. The area of the base of the box $was_{40}\frac{1}{4}$ square inches, and the height $was_{40}\frac{3}{4}$ inches. What was the volume of this box in cubic inches?
 - A $543\frac{3}{8}$
 - B. $480\frac{3}{8}$
 - C. $271\frac{11}{16}$
 - D. $240\frac{3}{16}$
- ^{14.} Rekeita has a bag that contains 4060.8 cubic inches of birdseed. She wants to sort the birdseed into small boxes that are in the shape of rectangular prisms. Each box has a height of $12\frac{1}{2}$ inches and a square

base with side length of $6\frac{1}{4}$ inches. What is the least number of these boxes needed to hold all the birdseed in the bag?

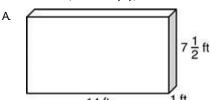
- A 2
- B. **5**
- c. 8
- D. **9**

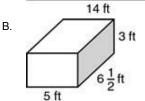
15. What is the volume of the right rectangular prism below?

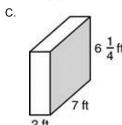


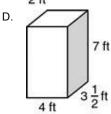
- $A 82 \text{ mm}^3$
- B. 40 mm³
- c. 12.5 mm³

16. A manager at a shipping company will purchase boxes in the shape of right rectangular prisms. He wants the volume of each box to be exactly 98 cubic feet. Which figure shows a box with the dimensions, in feet (ft), that the manager will purchase?



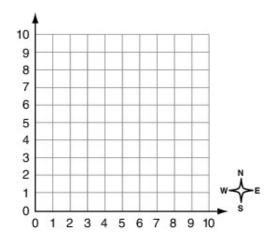






- ^{17.} A triangle has vertices at (2, -2), (2, 3), and (6, -2). What is the area of the triangle?
 - A 9 units²
 - B. 10 units²
 - C. 18 units²
 - D. 20 units²

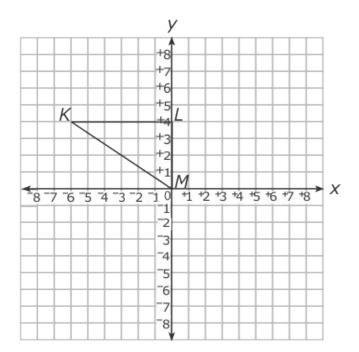
^{18.} Jared is making a map of his town on a grid. He needs to plot his house at (2,3), his school at (2,8), and the public library at (5,8).



Every weekday, Jared walks from his house to his school. After school, he walks to the library, where his mom picks him up. If each square equals 1 block, how many blocks does Jared walk each weekday?

- A 5 blocks
- B. 7 blocks
- c. 8 blocks
- D. 10 blocks

^{19.} Point N, located at ($^-$ 6,0), is added to the triangle below to form rectangle KLMN.



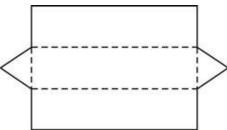
What is the area of rectangle KLMN?

- A 12 units²
- B. 16 units²
- C. 20 units²
- D. 24 units²
- ^{20.} Which polygon is formed when the ordered pairs below are graphed and then connected in order?

$$(1, ^-2), (3, ^-2), (3, 4), (1, 4)$$

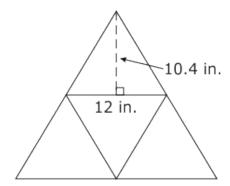
- A rectangle
- B. rhombus
- C. trapezoid
- D. square

21. Bethany made the following two-dimensional pattern to help her calculate the surface area of a three-dimensional figure.



Which three-dimensional figure is Bethany modeling?

- A. cone
- B. cylinder
- C. square pyramid
- D. triangular prism
- ^{22.} The net of a triangular pyramid is shown below. All the triangles are equilateral triangles.

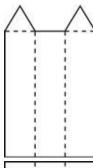


The approximate height of each triangle is 10.4 in. What is the *approximate* surface area of the triangular pyramid?

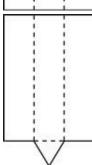
- A 500 in.²
- B. 375 in.²
- C. 250 in.²

23. Which of these figures could be folded along the dashed lines to make a triangular prism?

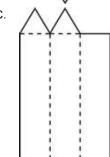




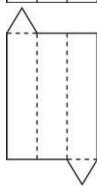
В.



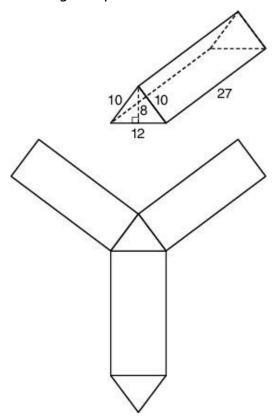
C.



D.



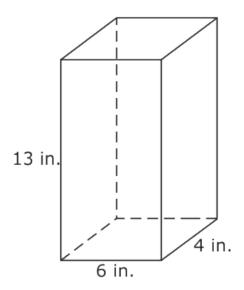
The object below is a triangular prism and its net.



What is the surface area of this triangular prism in square units?

- A. 906
- B. 912
- C. 960
- D. 1,056

^{25.} What is the surface area of the right rectangular prism below?



- A 130 in.²
- B. 154 in.²
- C. 308 in.²
- D. 312 in.²