

TEST NAME: **Geometry (G.3-G.4)**  
TEST ID: **181082**  
GRADE: **06**  
SUBJECT: **Mathematics**  
TEST CATEGORY: **School Assessment**

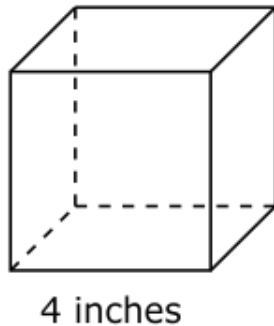
Student: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

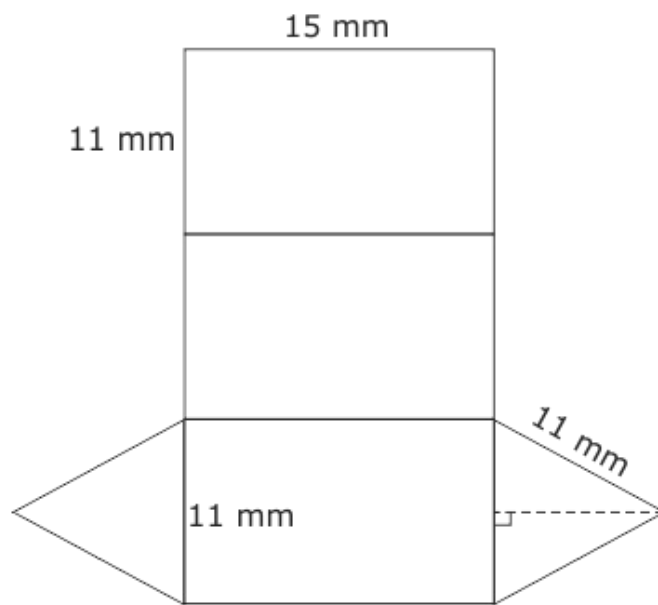
1. When graphed, a triangle has vertices located at  $(2, 5)$ ,  $(2, -3)$ , and  $(-5, -3)$ . What is the area of the triangle?
  - A. 15 units<sup>2</sup>
  - B. 28 units<sup>2</sup>
  - C. 32 units<sup>2</sup>
  - D. 56 units<sup>2</sup>
2. Rectangle  $MNOP$  has vertices at the coordinates  $M(-5, 3)$ ,  $N(1, 3)$ ,  $O(1, 1)$ , and  $P(-5, 1)$ . What is the area of a rectangle  $MNOP$ ?
  - A. 8 units<sup>2</sup>
  - B. 10 units<sup>2</sup>
  - C. 12 units<sup>2</sup>
  - D. 16 units<sup>2</sup>
3. Triangle  $XYZ$  is graphed on a coordinate plane at points  $X(3, -4)$ ,  $Y(3, 2)$ , and  $Z(7, -4)$ . What is the area of triangle  $XYZ$ ?
  - A. 10 units<sup>2</sup>
  - B. 12 units<sup>2</sup>
  - C. 24 units<sup>2</sup>
  - D. 28 units<sup>2</sup>
4. What is the perimeter of a figure that has vertices at points  $(-2, 5)$ ,  $(2, 5)$ ,  $(2, -8)$ , and  $(-2, -8)$ ?
  - A. 14 units
  - B. 17 units
  - C. 34 units
  - D. 52 units

5. A rectangle has vertices at  $(-1, 1)$ ,  $(-1, -7)$ ,  $(8, -7)$ , and  $(8, 1)$ . What is the perimeter of the rectangle?
- A. 17 units
  - B. 34 units
  - C. 36 units
  - D. 72 units
6. Square  $PQRS$  has two of its vertices at coordinates  $Q(2, 3)$  and  $S(-3, -2)$ . Which coordinates could be vertex  $R$ ?
- A.  $(2, -2)$
  - B.  $(-2, 2)$
  - C.  $(2, -3)$
  - D.  $(-2, 3)$
7. What is the surface area of the cube below?



- A. 16 square inches
- B. 24 square inches
- C. 64 square inches
- D. 96 square inches

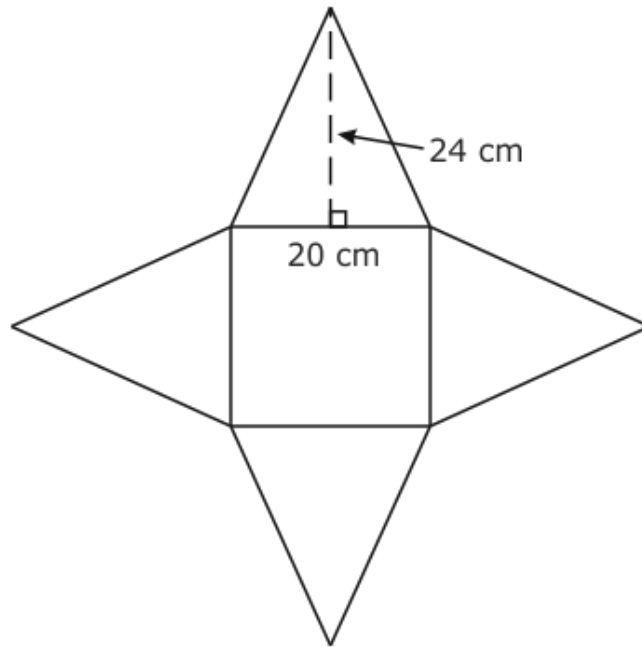
8. The net of a triangular prism is shown below. The heights of the triangles are approximately 9.5 mm.



What is the **approximate** surface area of the triangular prism?

- A.  $500 \text{ mm}^2$
- B.  $600 \text{ mm}^2$
- C.  $705 \text{ mm}^2$
- D.  $785 \text{ mm}^2$

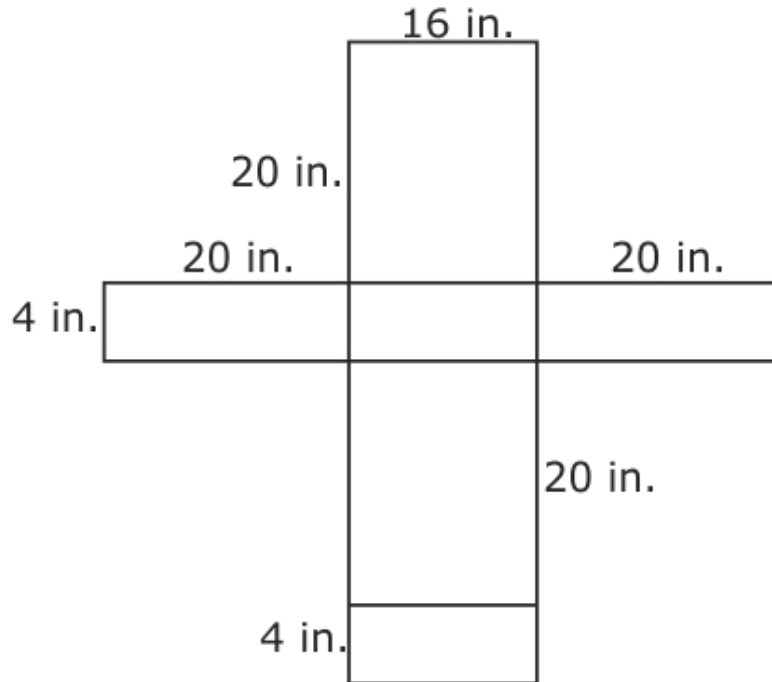
9. The net of a square pyramid is shown below.



What is the surface area of the square pyramid?

- A.  $1,360 \text{ cm}^2$
- B.  $1,920 \text{ cm}^2$
- C.  $2,320 \text{ cm}^2$

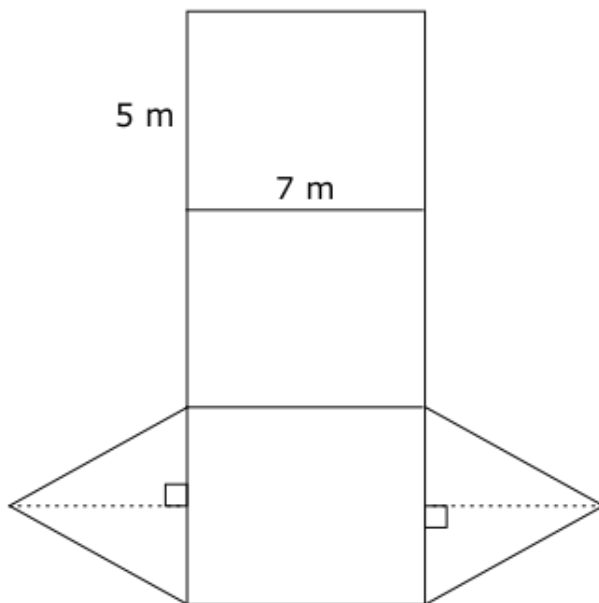
10. The net of a right rectangular prism is shown below.



What is the surface area of the prism?

- A.  $464 \text{ in.}^2$
- B.  $900 \text{ in.}^2$
- C.  $928 \text{ in.}^2$
- D.  $984 \text{ in.}^2$

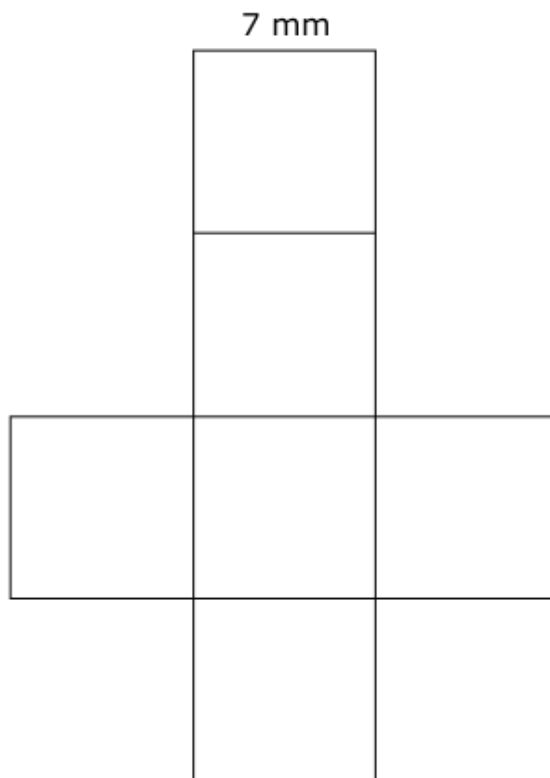
11. The net of a triangular prism is shown below. The height of each equilateral triangle is approximately 4.3 m.



What is the **approximate** surface area of the triangular prism?

- A.  $115 \text{ m}^2$
- B.  $127 \text{ m}^2$
- C.  $149 \text{ m}^2$
- D.  $155 \text{ m}^2$

12. The net of a cube with a 7-mm side length is shown below.



What is the surface area of the cube?

- A.  $245 \text{ mm}^2$
- B.  $252 \text{ mm}^2$
- C.  $294 \text{ mm}^2$
- D.  $343 \text{ mm}^2$