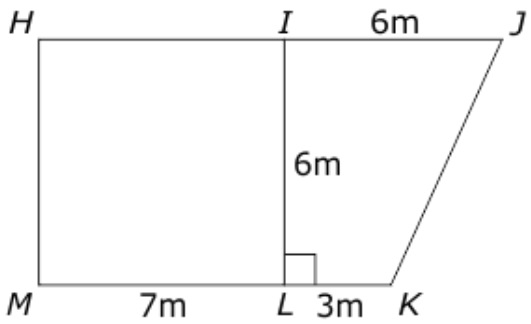
TEST NAME: **Geometry (G.1-G.2)**
TEST ID: **181078**
GRADE: **06**
SUBJECT: **Mathematics**
TEST CATEGORY: **School Assessment**

Student:

Class:

Date:

1. In the trapezoid below, *HILM* is a rectangle.



What is the area of trapezoid *HJKM*?

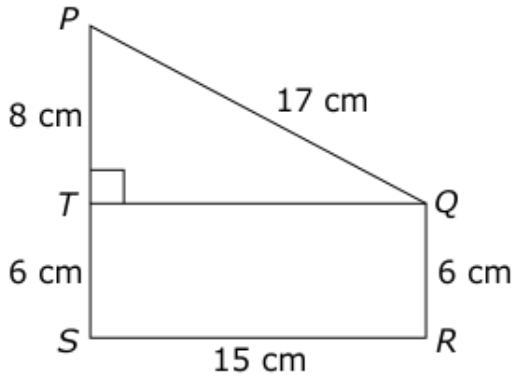
A. 138 m^2

B. 96 m^2

C. 69 m^2

D. 48 m^2

2. Polygon *PQRS* is composed of a rectangle and a right triangle.



What is the area of polygon *PQRS*?

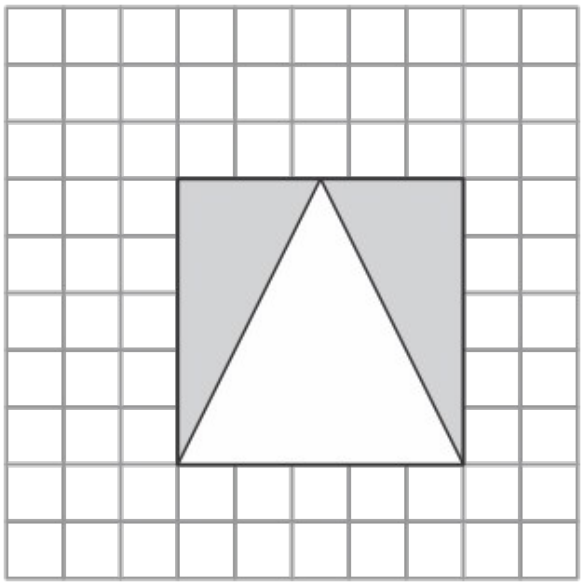
A. 150 cm^2

B. 158 cm^2

C. 210 cm^2

D. 226 cm^2

3. What is the area of the shaded region in the square below?



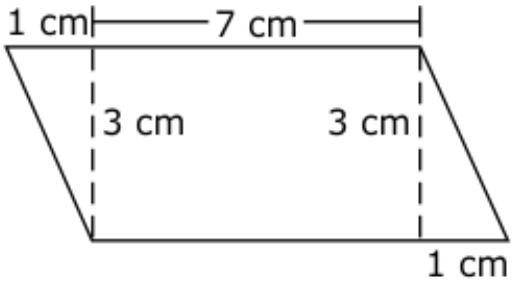
A. 7.5 units^2

B. 10 units^2

C. 12.5 units^2

D. 15 units^2

4. What is the area of the parallelogram?



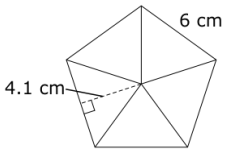
A. 18 cm^2

B. 21 cm^2

C. 24 cm^2

D. 27 cm^2

5. The regular pentagon below is made of five congruent triangles. The height of each triangle is approximately 4.1 cm.



What is the ***approximate*** area of the pentagon?

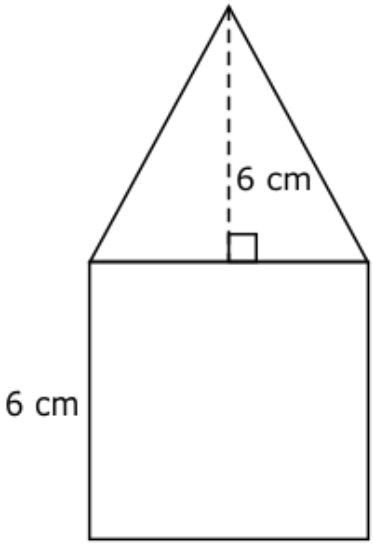
A. 24 cm^2

B. 62 cm^2

C. 98 cm^2

D. 123 cm^2

6. The figure below is made of a square and a triangle.



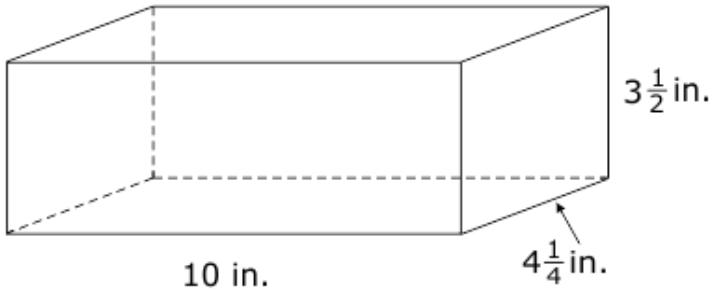
What is the area of the figure?

A. 30 cm^2

B. 54 cm^2

C. 72 cm^2

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



A. $17\frac{3}{4}$ in.^{3}

B. $42\frac{1}{2}$ in.^{3}

C. $53\frac{1}{4}$ in.^{3}

D. $148\frac{3}{4}$ in.^{3}

8. The sandbox at a park measures 8 ft wide, $8\frac{3}{4}$ ft long, and 2 ft deep. What is the volume of the sandbox?

A. 19 ft^3

B. 70 ft^3

C. 140 ft^3

D. 207 ft^3

9. A camera company packs each camera in a cube-shaped box with side lengths of $\frac{3}{4}$-ft. Then the company ships the cameras in a container with dimensions of $1\frac{1}{2}$ ft by $2\frac{1}{4}$ ft by $1\frac{1}{2}$ ft. What is the maximum number of camera boxes that will fit in the container?

A. 7

B. 8

C. 12

D. 18

10. Katie bought a cooler that measures $1\frac{1}{2}$ ft by 1 ft by $1\frac{1}{5}$ ft. What is the volume of the cooler?

A. $3\frac{1}{7}\text{ ft}^3$

B. $1\frac{4}{5}\text{ ft}^3$

C. $1\frac{2}{5}\text{ ft}^3$

D. $1\frac{1}{10}\text{ ft}^3$

11. John has a box shaped like a right rectangular prism. Its dimensions are $\frac{1}{2}$ feet tall, $1\frac{1}{2}$ feet wide, and 3 feet long. What is the volume of the box?

A. $1\frac{1}{2}\text{ ft}^3$

B. $2\frac{1}{4}\text{ ft}^3$

C. $4\frac{1}{2}\text{ ft}^3$

D. 5 ft^3

12. A right rectangular prism has dimensions of $2\frac{1}{2}$ cm by $1\frac{1}{2}$ cm by 3 cm. What is the volume of the right rectangular prism?

A. 12 cm^3

B. $11\frac{1}{4}\text{ cm}^3$

C. 7 cm^3

D. $6\frac{1}{4}\text{ cm}^3$