

TEST NAME: **Geometry Review**  
TEST ID: **187501**  
GRADE: **07**  
SUBJECT: **Mathematics**  
TEST CATEGORY: **School Assessment**

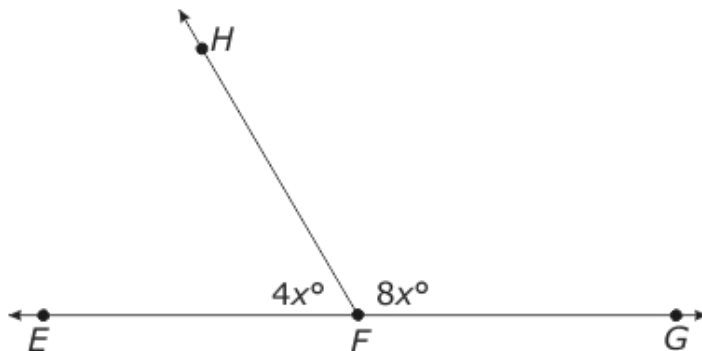
Student: \_\_\_\_\_

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

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

1. How many unique triangles can be drawn with side lengths 4 centimeters (cm), 6 cm, and 8 cm?
  - A. 0
  - B. 1
  - C. 2
  - D. 3
  
2. A triangle has sides that measure 30 mm and 45 mm. Which set of inequalities represents all the possible lengths of the third side of the triangle,  $t$ ?
  - A.  $t > 15$  and  $t < 75$
  - B.  $t \geq 15$  and  $t \leq 75$
  - C.  $t > 30$  and  $t < 45$
  - D.  $t \geq 30$  and  $t \leq 45$
  
3. The actual distance between Mike's house and John's house is 28 km. On a map, the distance between the two houses is 3.5 cm. What is the scale used on this map?
  - A. 2 cm = 7 km
  - B. 2 cm = 5 km
  - C. 1 km = 8 cm
  - D. 1 cm = 8 km

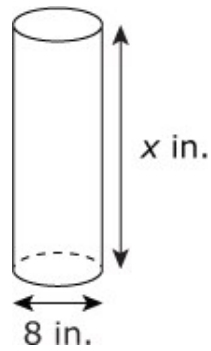
4. In the figure below,  $\angle EFH$  and  $\angle HFG$  are supplementary.



What is the measure of  $\angle HFG$ ?

- A.  $60^\circ$
  - B.  $100^\circ$
  - C.  $120^\circ$
5. A rectangular prism is cut perpendicular to its base. What two-dimensional figure is formed by the cross section?
- A. triangle
  - B. trapezoid
  - C. rectangle

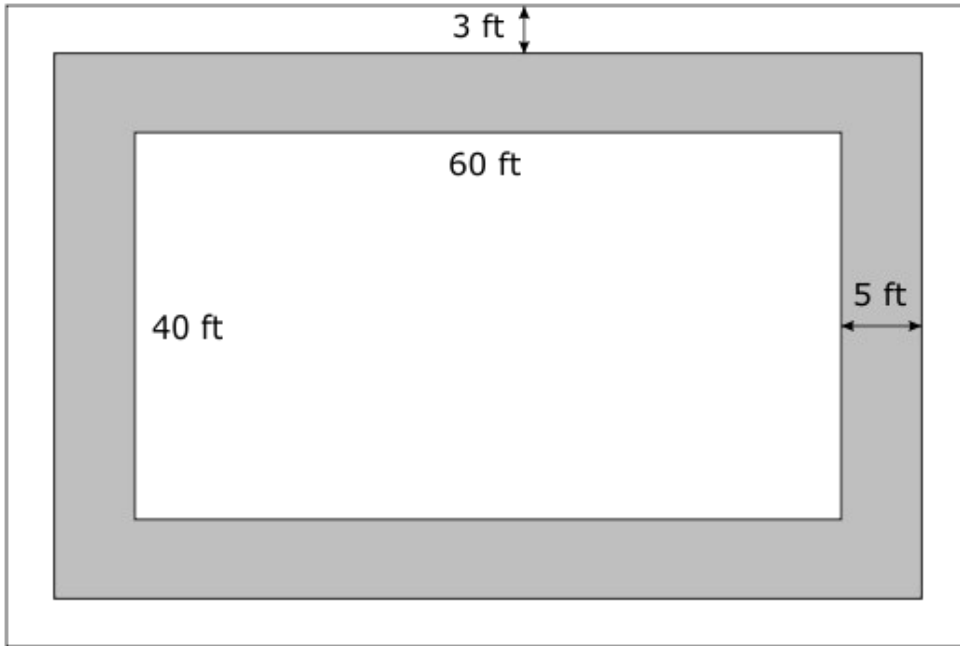
6. An engineer creates a scale drawing of a storage tower that is a right cylinder as shown below.



For the actual storage tower, the diameter is 16 feet and the height is 45 feet. What is the height,  $x$ , of the storage tower in the scale drawing?

- A. 45 in.
- B. 22.5 in.
- C. 11.4 in.
- D. 4.5 in.

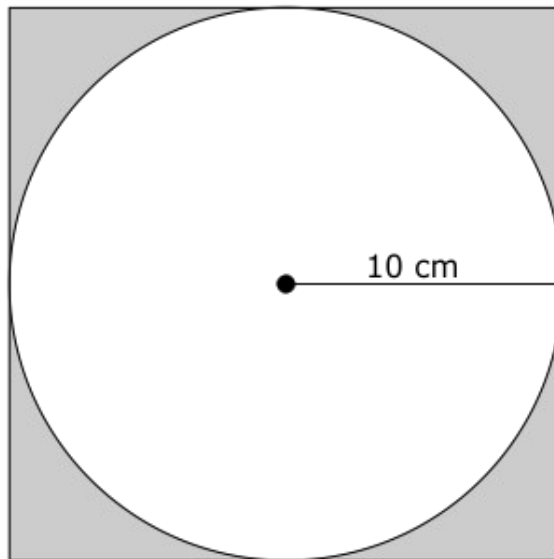
7. Workers put a sidewalk completely around a building that measures 40 ft by 60 ft. The sidewalk is 5 ft away from each side of the building. The sidewalk is 3 ft wide.



What is the area of the sidewalk?

- A.  $264 \text{ ft}^2$
  - B.  $756 \text{ ft}^2$
  - C.  $3,500 \text{ ft}^2$
  - D.  $4,256 \text{ ft}^2$
8. Which set of side lengths could be used to create a triangle?
- A. 1 ft, 2 ft, 3 ft
  - B. 3 ft, 4 ft, 5 ft
  - C. 8 ft, 8 ft, 17 ft
  - D. 10 ft, 15 ft, 25 ft

9. One side of the square below measures 20 cm.



What is the **approximate** area of the shaded region of the square?

- A.  $43 \text{ cm}^2$   
B.  $86 \text{ cm}^2$   
C.  $100 \text{ cm}^2$   
D.  $314 \text{ cm}^2$
10. Joe had a rectangular piece of fabric 1.7 m by 2.3 m. He cut off a rectangular piece measuring 0.8 m by 0.65 m. What is the area of the remaining piece?
- A.  $0.52 \text{ m}^2$   
B.  $3.39 \text{ m}^2$   
C.  $3.91 \text{ m}^2$   
D.  $4.43 \text{ m}^2$