

Squares and Rectangles



Multiple Choice

 $(5 \times 2 \text{ points} = 10 \text{ points})$

Fill in the circle next to the correct answer.

1. How is a square different from a rectangle?

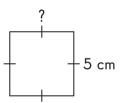
A square _____ and a rectangle does not.

(A) has 4 sides

(B) has 2 pairs of parallel sides

C has 4 equal sides

- (D) has 4 right angles
- **2.** What is the sum of the lengths of the unknown sides?



11 cm 7 cm

(A) 5 cm

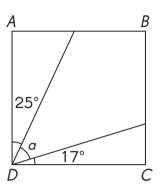
(B) 7 cm

(C) 11 cm

(D) 16 cm

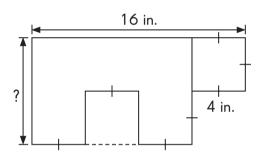
89

3. ABCD is a square. What is the measure of the unknown angle?



- (A) 73°
- (C) 48°

- (B) 65°
- (D) 42°
- **4.** Find the unknown length in the figure.



- (A) 2 in.
- (C) 8 in.

- (B) 4 in.
- (D) 10 in.
- The length of rectangle ABCD is twice its width. AB + BC = 12 feet. Find AB.



(A) 3 ft

(B) 4 ft

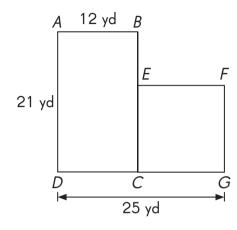
(C) 6 ft

(D) 8 ft

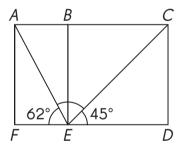
Short Answer

 $(5 \times 2 \text{ points} = 10 \text{ points})$

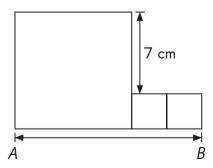
6. Find the unknown length *BE. ABCD* is a rectangle and *EFGC* is a square.



7. ACDF is a rectangle and BCDE is a square. Find the measure of angle AEC.

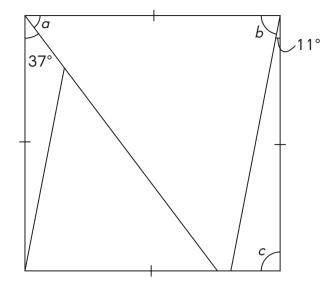


8. The figure is made up of a big square and 2 smaller identical squares. The lengths are all whole numbers. What is the least possible length of segment *AB*?



91

9. Find the measures of the unknown angles in the square below.

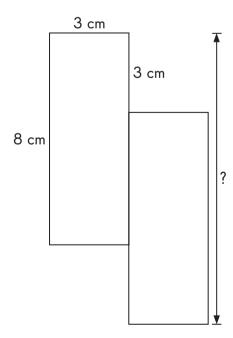


Measure of angle a =

Measure of angle b =

Measure of angle c =

10. Find the unknown length. The figure is made up of two identical rectangles.



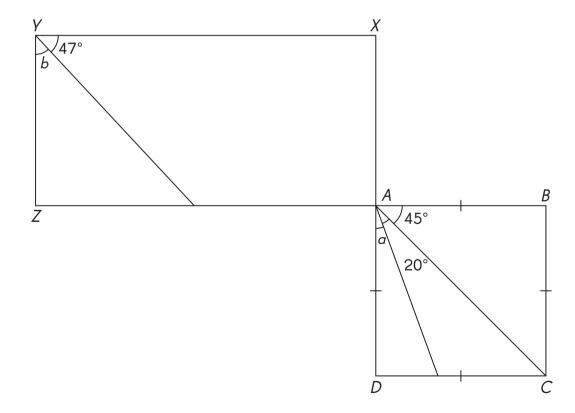
Extended Response

(Question 11: 2 points, Question 12: 3 points)

11. The figure is made up of four identical rectangles. Find the unknown length.



12. ABCD is a square and AXYZ is a rectangle. Find the sum of the measures of the unknown angles a and b.



93