Assignment 10-2
Area of Composite Figures

Unit 10

1. Review. Simplify each expression.

a. $\left(\dfrac{2}{3}\div\dfrac{2}{3}\right)\div\left(\dfrac{-5}{8}\right)\div$

b. $\dfrac{2}{3}+\left(\dfrac{x-5}{8}\right)\div$

c. $\dfrac{-5}{8}-\dfrac{2}{3}$

2. **Find the area of the following shapes.**

a.

6 cm.

6 cm.
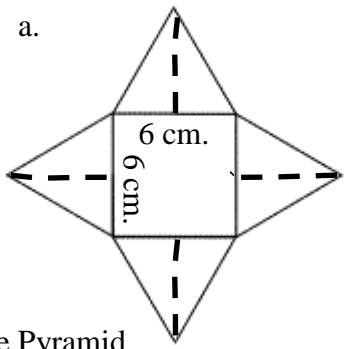
Square Pyramid
Height of each triangle is 3 cm.

b.

15 ft.

5 ft.   6 ft.

6 ft.

5 ft.

c.

4 m   3 m

4 m

5 m

12 m

5 m
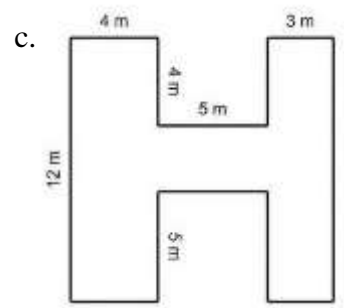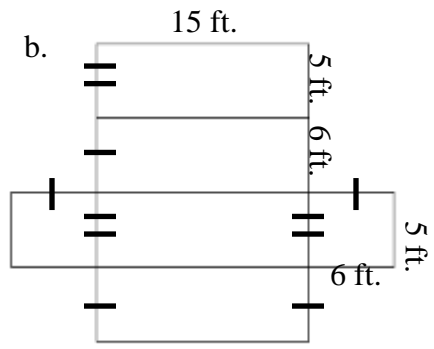
3 a.
A lap pool with a length of 40 ft. and a width of 15 ft. is surrounded by a 5-ft. wide deck. Find the area of the deck.
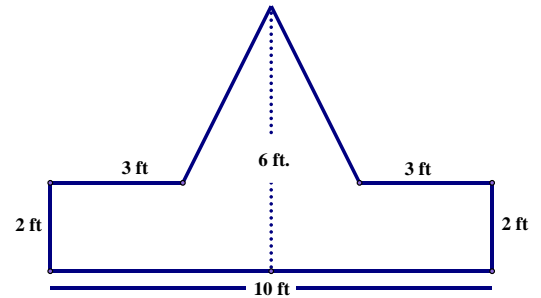
15 ft   5 ft

40 ft
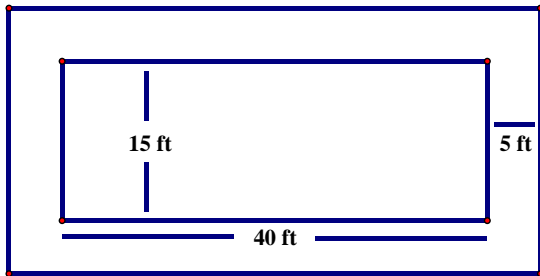
3 b. Draw a picture of the deck if the deck if it is extended 3 feet in every direction, then find the area of the new deck
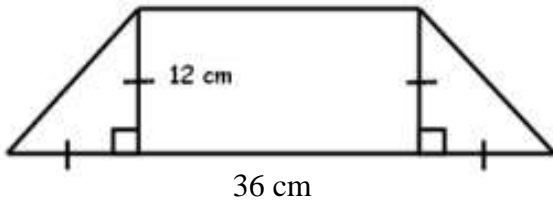
4. A rectangular field with two semi-circles at each of the shorter ends of the field measures 100 yards long and 40 yards wide. It is surrounded by a track that is 5 yards wide. Find the area of the **field** which includes the two semi-circles on each of the shorter ends of the rectangle. Find the area of the track.
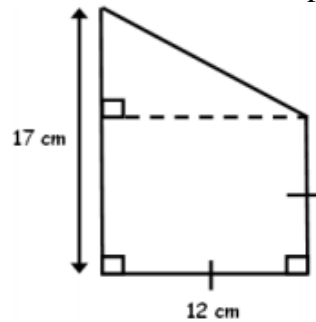
5 yd

40 yd

100 yd
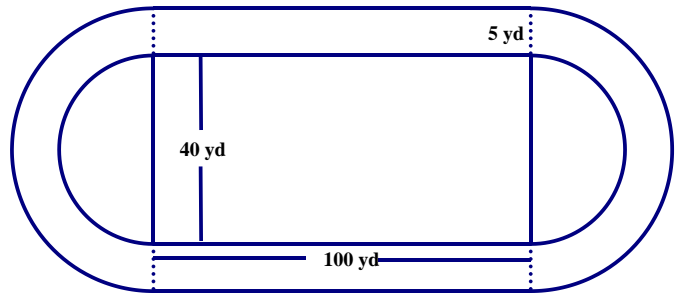
5. Laura is painting a sign for the new Post Office. She will paint the triangular portion blue and the lower rectangular portion red. Find the area of sign that she will paint blue. What percent of the sign will be in blue?
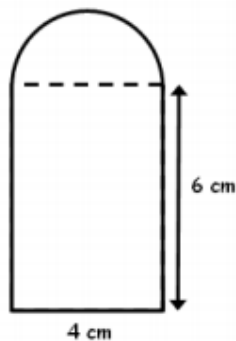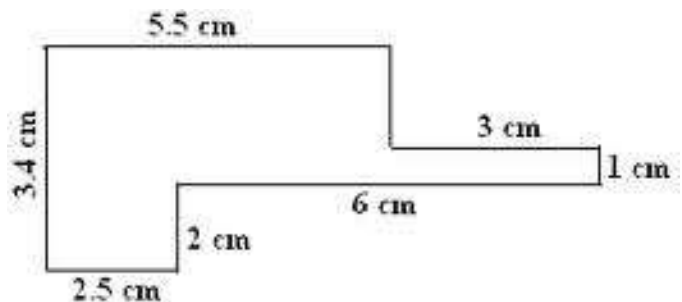
3 ft   6 ft.   3 ft

2 ft   2 ft

10 ft

6. Find the area of the shape.

12 cm

36 cm

7. Find the area of the shape.

17 cm

12 cm

8. Find the area of the shape.

6 cm

4 cm

9. Find the area of the shape.

5.5 cm

3.4 cm

3 cm

1 cm

6 cm

2 cm

2.5 cm

Simplify.

10. $3x - 5y + 14x + y$

11. $-4.3s - 5.2s + 6t + 3.75t - d$

12. $\frac{1}{4}y - \frac{3}{5}x - \frac{7}{8}y + \frac{2}{3}z$