5. What is the surface area of the cylinder? Round to the nearest tenth.

$$2\pi r^2 + 2\pi r h$$

bases

lateral area

3 ft

11 ft

8. The storage tank shown at the right is to be painted. What is the area of the surface to be painted? Assume that the bottom does not need painting. Round to the nearest whole number.
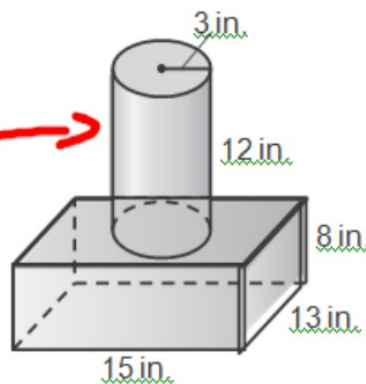
$$1\pi r^2 + 2\pi r h$$

15 ft

40 ft
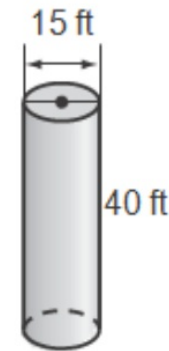
8. _

10. What is the volume of the composite shape to the nearest whole number?

$$\pi r^2 h = \pi (3)^2 (12)$$

$$l \times w \times h = (15)(13)(8)$$

... then add :)

3 in.

12 in.

8 in.

13 in.

15 in.

10. _____

11. The surface area of a triangular prism is 62 square inches. What is the surface area of a similar prism that is four times as large?

$$62(4)^2$$

11. _____

12. A cone has a volume that is 260 cubic meters. What is the volume of a similar cone that is three times as large as the first cone?

$$260(3)^3$$

12. _____

9. The popcorn containers at a movie theater are in the shape of cones. Suppose a popcorn container has a radius of 8 inches and a slant height of 13 inches. What is the lateral area of the popcorn container rounded to the nearest inch?

$$\pi r^2 + \pi r l$$

base

$$L.A. = \pi (8)(13)$$

9. _____