

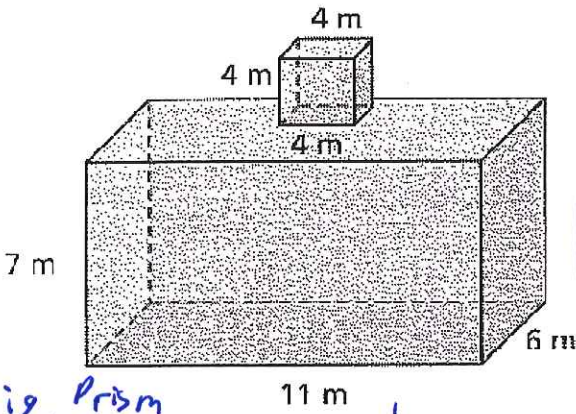
Complex Figures

Name: Key

7th Grade Math

Evaluate the surface area of each figure.

1.



Big Prism

11 m

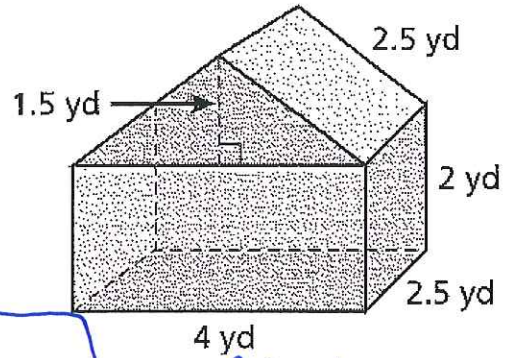
$$A_{L \times R} = 2(6m \cdot 7m) = 84m^2$$

$$A_{F+B} = 2(7m \cdot 11m) = 154m^2$$

$$A_{T+B} = 2(6m \cdot 11m) = 132m^2$$

$$370m^2$$

2.



Small Prisms

$$4(4m \cdot 4m) = 64m^2$$

Total S.A.

$$370m^2 + 64m^2$$

$$\boxed{434m^2}$$

Rec Prism:

$$A_{F+B} = 2(2yd \cdot 4yds) = 16yds^2$$

$$A_{L \times R} = 2(2yd \cdot 2.5yds) = 10yds^2$$

$$A_{Bot} = 2.5yd \cdot 4yd = 10yds^2$$

$$36yds^2$$

Triq Prism

$$A_T = 2\left(\frac{1}{2} \cdot 4yd \cdot 1.5yd\right) = 6yds^2$$

$$A_{L \times R} = 2(2.5yd \cdot 2.5yds) = 12.5yds^2$$

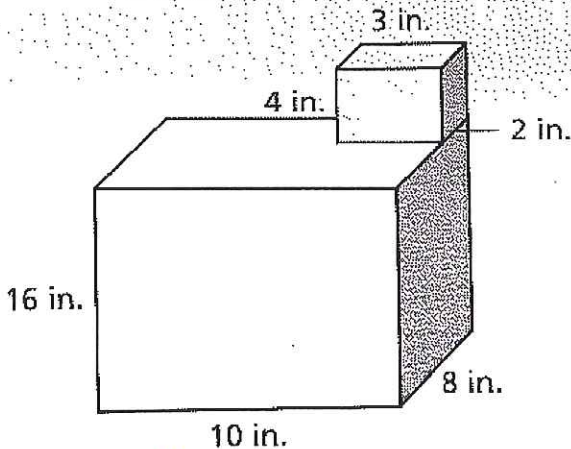
$$18.5yds^2$$

Total S.A.

$$36yds^2 + 18.5yds^2$$

$$\boxed{54.5yds^2}$$

3.



Big Prism

$$A_{L \times R} = 2(8in \cdot 16in) = 256in^2$$

$$A_{F+B} = 2(10in \cdot 16in) = 320in^2$$

$$A_{T+B} = 2(8in \cdot 10in) = 160in^2$$

$$736in^2$$

Small Prism

No Top or Bottom

$$A_{L \times R} = 2(2in \cdot 4in) = 16in^2$$

$$A_{F+B} = 2(3in \cdot 4in) = 24in^2$$

$$40in^2$$

Total S.A.

$$736 + 40$$

$$\boxed{776in^2}$$