

Problem of the Day: Find the perimeter of the base.

Plan for the Day: Integer quiz (if need)

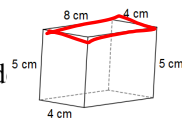
Go over volume test

Finish notes on surface area of rectangular prisms

More practice with surface area of rectangular prisms

Objective: We will be able to find the surface area of a rectangular prism.

Today is National Boss's Day and National Sports Day!



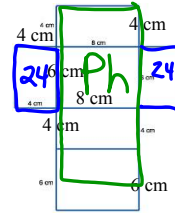
+ perimeter
24 cm

The formula to find the total surface area of a prism is

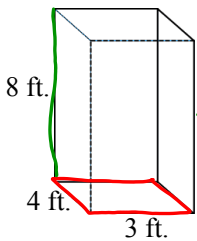
$$LSA$$

$$S = Ph + 2B$$

where P is the perimeter of the base, h is the height of the prism, and B is the area of the base



Example 3: Find the total surface area of the prism.



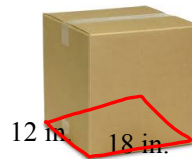
$$SA = Ph + 2B \quad B = bh$$

$$14 \cdot 8 + 2 \cdot 4 \cdot 3$$

$$112 + 24$$

$$SA = 136 \text{ ft}^2$$

Example 4: Find the total surface area of the object.



$$SA = Ph + 2B \quad B = bh$$

$$60 \cdot 15 + 2 \cdot 12 \cdot 18$$

$$900 + 432$$

$$SA = 1332 \text{ in}^2$$

Example 5: Bob made this box shown below in shop. He wants to paint it before taking it home. How much paint will he need to cover the entire box with one coat of paint?

$$SA = Ph + 2B \quad B = bh$$

$$64 \cdot 8 + 2 \cdot 15 \cdot 17$$

$$512 + 510$$

$$SA = 1022 \text{ cm}^2$$

