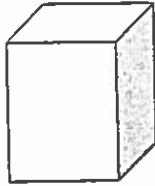


# HW # 1.5

- 1 Justin wanted to wrap his mom's birthday present shaped like a rectangular prism with pretty paper. The box is 2.1 feet long, 2.7 feet wide and 3.2 feet high. What is closest to the total surface area of the box?



- A 34 ft<sup>2</sup>                      C 30 ft<sup>2</sup>  
 B 42 ft<sup>2</sup>                      D 18 ft<sup>2</sup>

You must show your work.

$$S = Ph + 2B$$

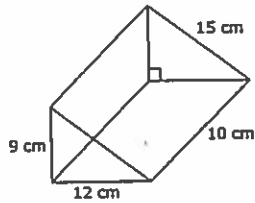
Base ↓

P = \_\_\_\_\_

h = \_\_\_\_\_

B = \_\_\_\_\_

- 2 Jose is constructing boxes in the shape of a triangular prism. How much cardboard is needed to make each box?



- A 3,240 cm<sup>2</sup>                      C 1,728 cm<sup>2</sup>  
 B 1,404 cm<sup>2</sup>                      D 468 cm<sup>2</sup>

$$S = Ph + 2B$$

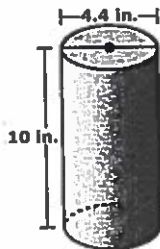
Base ↓

P = \_\_\_\_\_

h = \_\_\_\_\_

B = \_\_\_\_\_

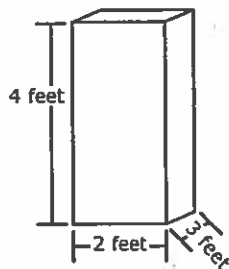
- 3 Julie is shipping a poster to her friend in Colorado. She needs to wrap the cylindrical box with shipping paper. How much paper will she need to completely cover the box?



- A 138.23 in.<sup>2</sup>                      C 152.05 in.<sup>2</sup>  
 B 168.64 in.<sup>2</sup>                      D 259.87 in.<sup>2</sup>

$$S = 2\pi rh + 2\pi r^2$$

- 4.) The rectangular prism below needs to be wrapped with paper before it is shipped. How many square feet of paper is needed to wrap the prism?



- A 52 ft<sup>2</sup>  
 B 40 ft<sup>2</sup>  
 C 64 ft<sup>2</sup>  
 D 24 ft<sup>2</sup>

$$S = Ph + 2B$$

Base ↓

P = \_\_\_\_\_

h = \_\_\_\_\_

B = \_\_\_\_\_