Worksheet 3: Building a Grade Level Concept (Calculating Surface Area)
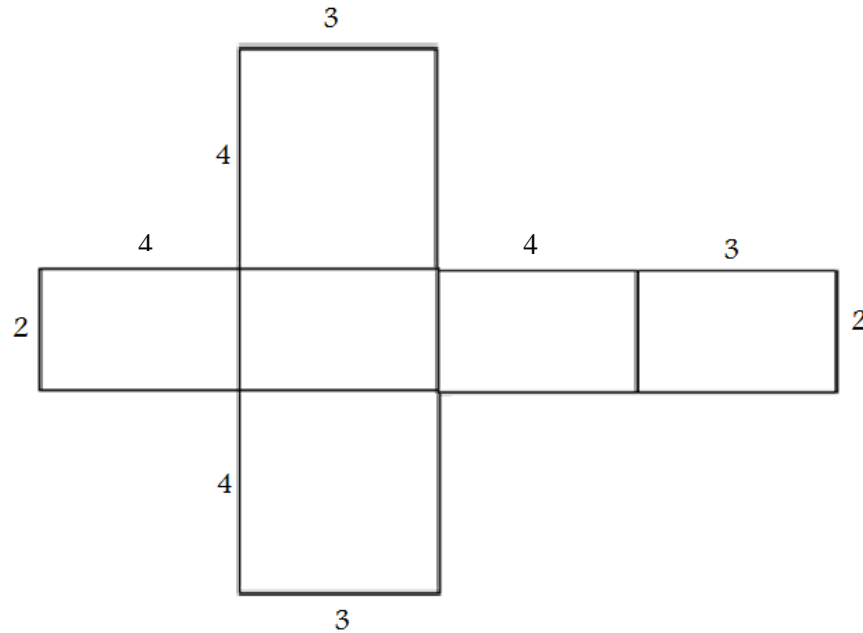
surface area = 2(length x height) + 2(height x width) + 2(width x length)

surface area = 2(_____ x _____) + 2(_____ x _____) + 2(_____ x _____)

                length   height   height   width   width   length
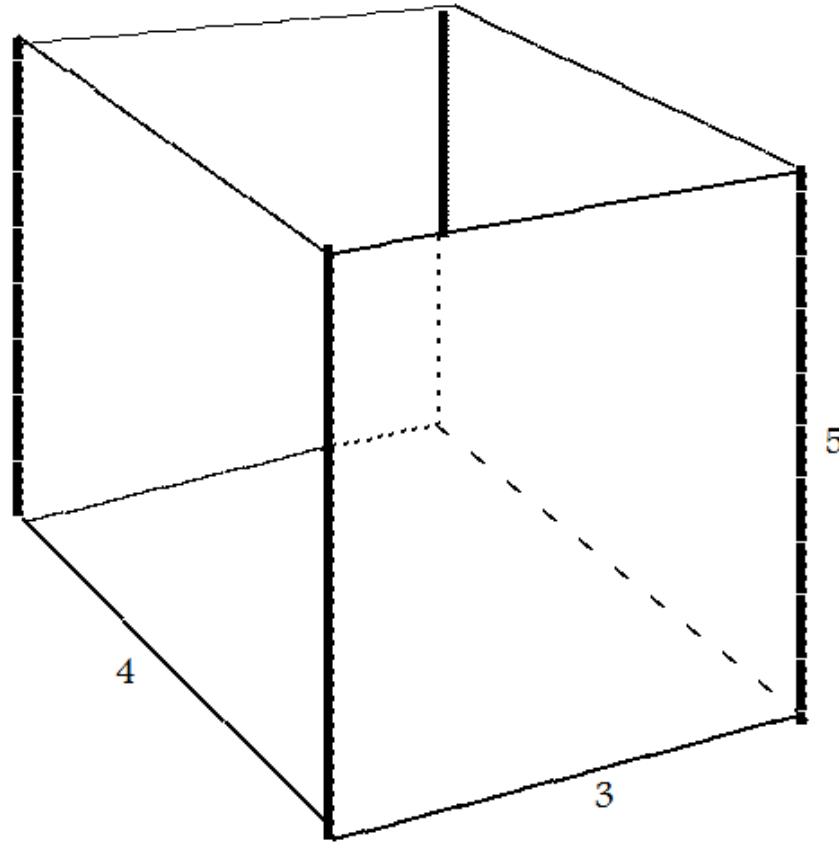
surface area = _____

Worksheet 3: Generalization

Mr. Williams has a file cabinet in his classroom that he wants to paint. He made a net on paper so he can calculate the surface area of the file cabinet in order to buy enough paint. Can you calculate the surface area of file cabinet?

$$\underbrace{\rule{3cm}{0.4pt}}_{\text{surface area}} = 2(\underbrace{\rule{1.5cm}{0.4pt}}_{\text{length}} \times \underbrace{\rule{1.5cm}{0.4pt}}_{\text{height}}) + 2(\underbrace{\rule{1.5cm}{0.4pt}}_{\text{height}} \times \underbrace{\rule{1.5cm}{0.4pt}}_{\text{width}}) + 2(\underbrace{\rule{1.5cm}{0.4pt}}_{\text{width}} \times \underbrace{\rule{1.5cm}{0.4pt}}_{\text{length}})$$

What is the surface area of the box shown below?

5

4

3

_____ = 2(_____ x _____) + 2(_____ x _____) + 2(_____ x _____)

surface area   length   height   height   width   width   length