

Rectangular Prisms: Units of Measure

Grades: 4-6

Standards: MG 4.1.4, MG 5.1.3, MG 6.1.3

Objectives: Compare linear, planar, and spatial units. Find the volume of rectangular prisms.

Warm Up and Debrief

Create a three-column chart for note taking.

Label each column: Volume, Surface Area, and Perimeter of the Net.

**Use linker cubes to construct a 3 unit ! 3 unit ! 3 unit cube. Let each linker cube represent a cube with a side of 1 cm.**

**Sketch the cube, label each dimension, and record the number of cubes used to build the shape in the first column.**

Volume

Surface Area

Perimeter of the Net

$$V = 27 \text{ cm}^3$$

**Record each face in the second column. Find the area of each face, add, and record the sum.**

Volume

Surface Area

Perimeter of the Net

$$V = 27 \text{ cm}^3$$



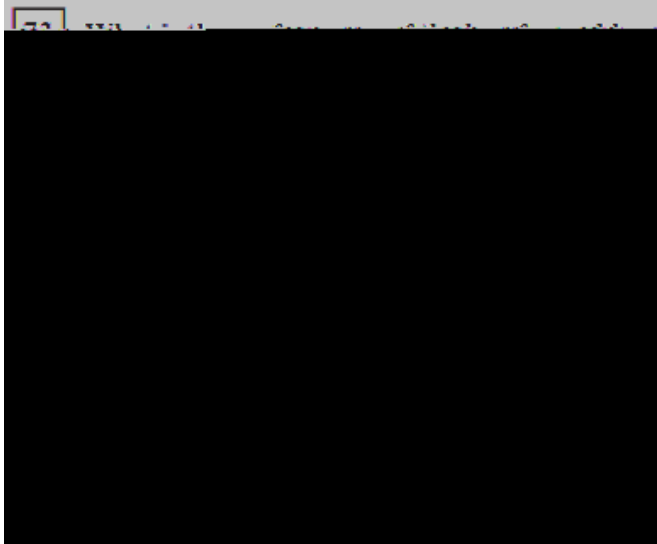
Rectangular Prisms: Units of Measure

**Introduce/review the formula  $V=Bh$ .** Use a deck of cards to illustrate the concept. Use the formula to check the first two examples in your notes.



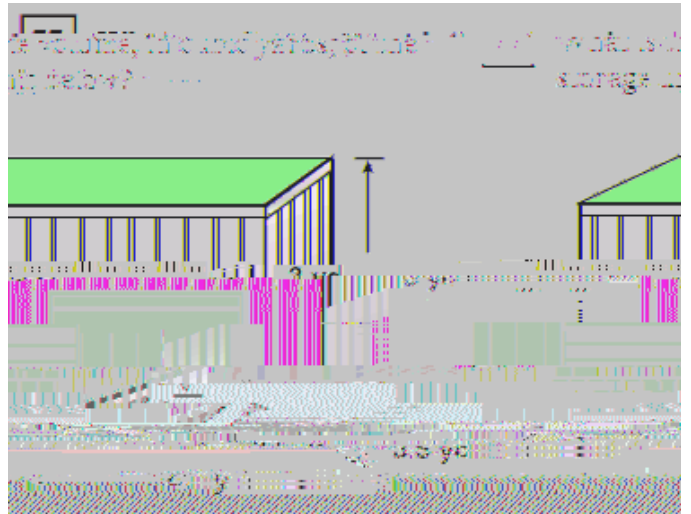
Warm-Up

CST/CAHSEE: Grade 5 MG 1.2



\*What is the perimeter of this net?

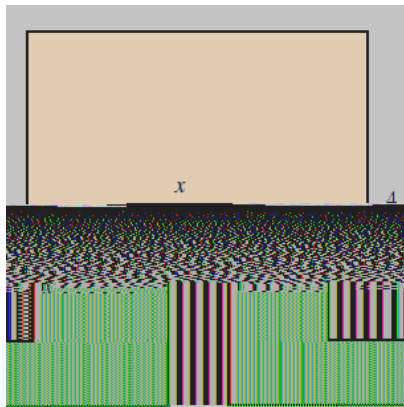
Review: Grade 5 MG 1.3



\*Draw the net for this rectangular prism.

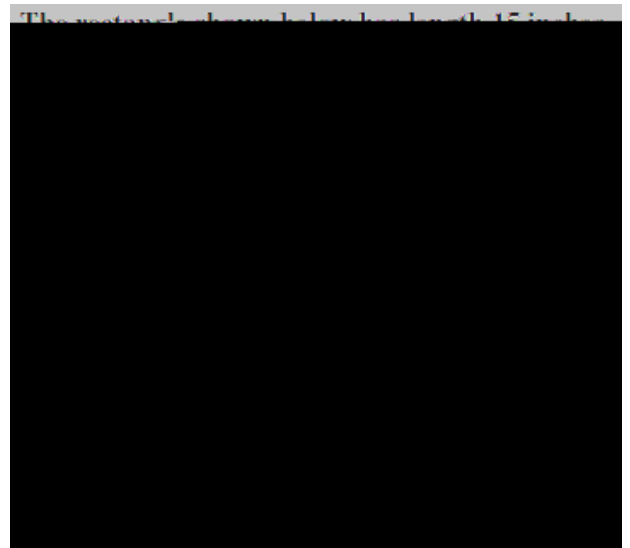
Current: Grade 6 AF 3.1

Write an expression describing the shaded region of the square.



\*Make a function table to test  $x$  when it has values greater than 0 but less than 4.

Other: Grade 6 AF 3.2



How could you find the height of this rectangle if you knew its perimeter?

If the area is  $185 \text{ in}^2$ , what is P?