In the previous tutorial, I was preparing to paint some rectangular wall spaces in my home. I'll review some of the calculations that were part of my preparation.

Area is a two-dimensional quantity.

- How would I explain the dimensions required to calculate the area of this wall space?

- How will I use the dimensions of the wall space to calculate the area of the wall?

- Why is an area solution always explained as units squared or square units?

Let's imagine I painted my rectangular wall space as shown below. Then, I adjust the rectangular painted space… to form the shape of a parallelogram.

- How could I prove that the area of the parallelogram space is equal to the area of the previous rectangular space?

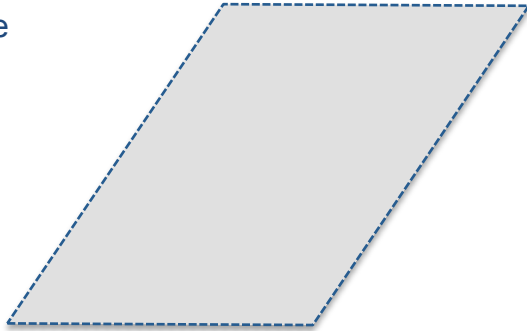- How would I compare calculating the area of a rectangle to a parallelogram?

A rectangle and a parallelogram each have a height dimension.
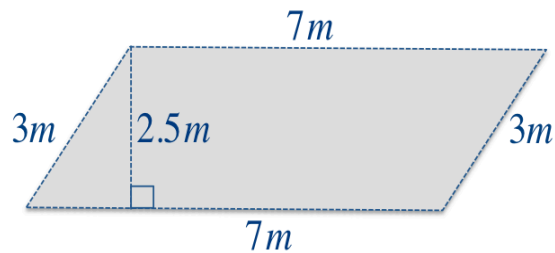
height

base

height

base

- How would I explain my thinking when identifying the height dimension for each shape?

- How would I choose to label the base and height of this parallelogram?

- How would I explain why it's possible to calculate the <u>perimeter</u> of the parallelogram shown below?

$$7m$$

$$3m \quad 2.5m \qquad\qquad 3m$$

$$7m$$

- How would I explain why it's also possible to calculate the <u>area</u> of this parallelogram?

- How would I explain and demonstrate calculating the area of the parallelogram?

☑ I can explain how I identify the dimensions of a parallelogram

☑ I can compare how the height of a parallelogram is different/same as the height of a rectangle

☑ I can explain how the dimensions of a parallelogram are used to calculate the area of a parallelogram

☑ I can demonstrate how I calculate the area of a parallelogram

☑ I can explain why area is measured using square units