

Standards:
PS.2, PS.7, G.QP.5

The perimeter of a rectangle is 22 meters.
The area of a rectangle is 24 square meters.

On the white board:

a) Show all possible dimensions for the perimeter of the given rectangle.

b) Show all possible dimensions for the area of the given rectangle

c) Write an equation that could be used to solve for perimeter of a rectangle.

d) Write an equation that could be used to solve for area of a rectangle.

On your own:

e) Chris says the dimensions are 9 m and 2 m. Rachel says the dimensions are 6 m and 4 m. Do either of the dimensions satisfy both requirements of perimeter and area? Explain.

f) Explain your answer for the dimensions that do satisfy the perimeter and area of the given rectangle. Use words, numbers, and/or diagrams to describe a process for finding the dimensions that would satisfy both requirements.