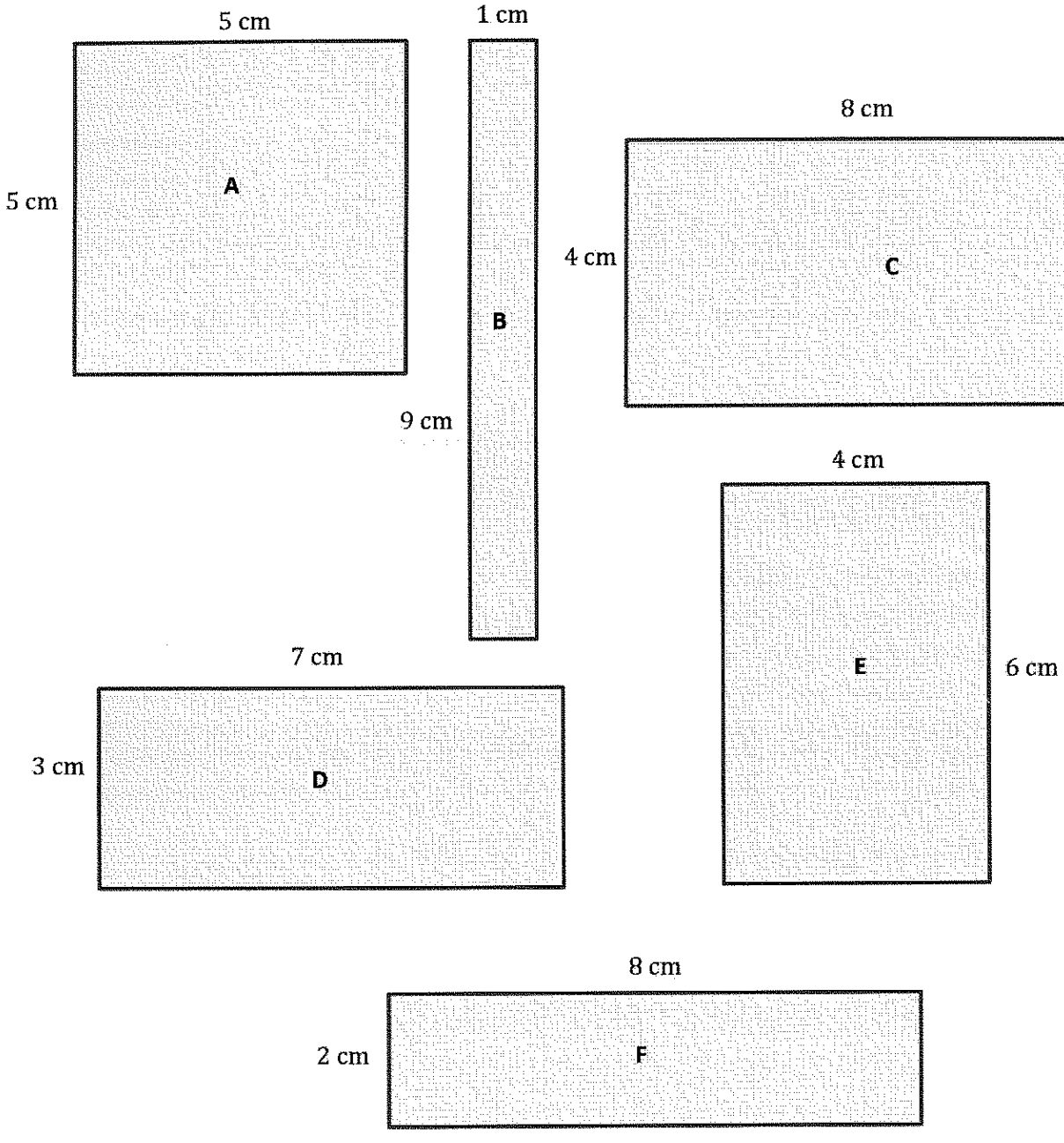
G3-M7-Lesson 27

Record the perimeters and areas of the rectangles in the chart on the next page.



I can choose to use mental math to solve for the perimeter and area. I do not need to write out multiplication and addition sentences if I can do it in my head.

1. Find the area and perimeter of each rectangle.

Rectangle	Width and Length	Perimeter	Area
A	5 cm by 5 cm	$4 \times 5 \text{ cm} = 20 \text{ cm}$	$5 \text{ cm} \times 5 \text{ cm} = 25 \text{ sq cm}$
B	9 cm by 1 cm	$18 \text{ cm} + 2 \text{ cm} = 20 \text{ cm}$	$9 \text{ cm} \times 1 \text{ cm} = 9 \text{ sq cm}$
C	4 cm by 8 cm	$8 \text{ cm} + 16 \text{ cm} = 20 \text{ cm}$	$4 \text{ cm} \times 8 \text{ cm} = 32 \text{ sq cm}$
D	3 cm by 7 cm	$6 \text{ cm} + 14 \text{ cm} = 20 \text{ cm}$	$3 \text{ cm} \times 7 \text{ cm} = 21 \text{ sq cm}$
E	6 cm by 4 cm	$12 \text{ cm} + 8 \text{ cm} = 20 \text{ cm}$	$6 \text{ cm} \times 4 \text{ cm} = 24 \text{ sq cm}$
F	2 cm by 8 cm	$4 \text{ cm} + 16 \text{ cm} = 20 \text{ cm}$	$2 \text{ cm} \times 8 \text{ cm} = 16 \text{ sq cm}$

2. What do you notice about the perimeters of all the rectangles?

All of the rectangles have different side lengths but the same perimeter of 20 cm.

I can see again how perimeter and area do not have any connection with one another.

3. Which rectangle is a square? How do you know?

Rectangle A is a square. I know because the width and length have the same measurement. Since opposite sides of rectangles are equal, Rectangle A has all equal side lengths and 4 right angles. That means it's a square!