

TAKING IT FURTHER: The R2D2 Problem

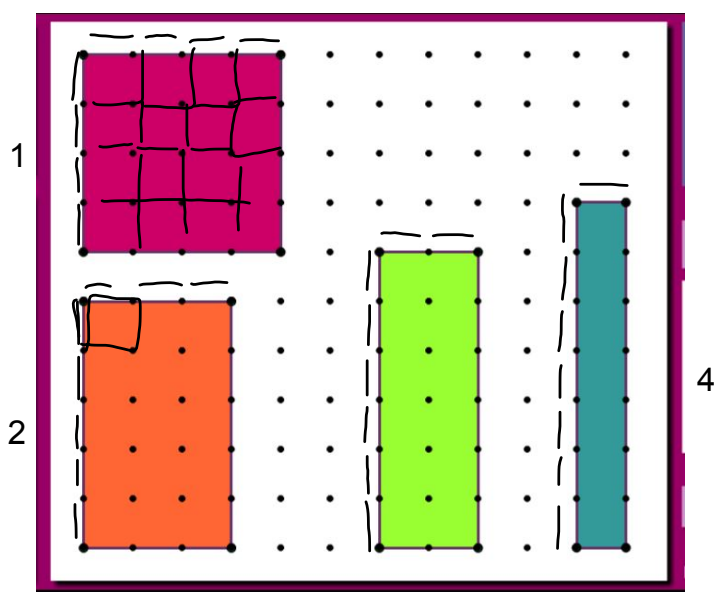
GROUP WORK: On your groups' chalkboard.

**What if we had 1350
stickies?**

**What size and shape of
boards could we cover?**

What do you notice?

What do you wonder?



$\boxed{1} \quad \underline{P} = 16 \text{ cm}^3$ (distance around outside)
 $A = 4 \text{ cm} \times 4 \text{ cm}$
 $\rightarrow \underline{A} = 16 \text{ cm}^2$ (space inside shape)

PROBLEM OF THE WEEK:



$$\text{Area} = l \times w$$

$$1350 = l \times w$$

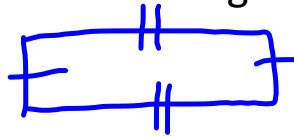
stickies

Which of these statements makes no sense?

1. The perimeter of the rectangle is 50 ft. ✓ → very big!
2. The area of the square is 20 m. ✗

$$4\text{ m} \times 5\text{ m} = 20\text{ m}^2$$

3. A rectangle has side lengths of 5 ft, 9 m, 5 ft and 9 ft. ✗



4. The perimeter of the circle is 3 m^2 . ✗ 3 m

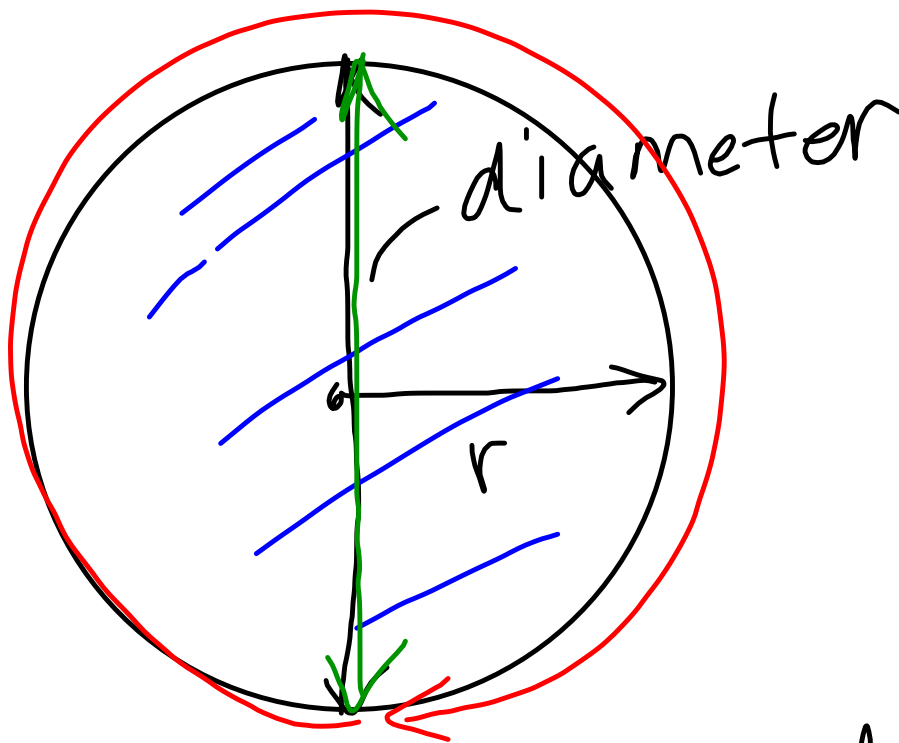
5. The perimeter of the circle is the circumference of the circle. ✓ $P = C$

6. The length around the outside of a shape is the area. ✗
7. The 2-D space inside a shape is the perimeter. ✗
- area

8. The area of the square is 14 ft^2 . ✓

9. The area of the rectangle is 20 foot-meters.

10. The area of a piece of land is 2 acres.



$$\underline{\underline{C}} = \underline{\underline{P}} = \pi d$$
$$= 3.14 \times d$$

$$\underline{\underline{A}} = \pi r^2$$
$$= 3.14 \times r \times r$$