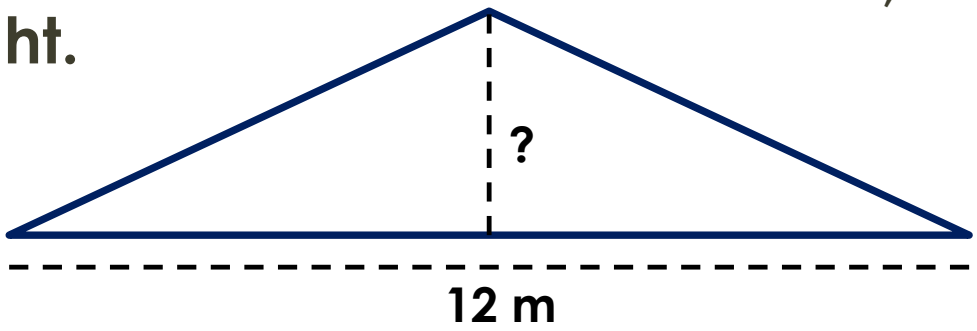
Created by Mr. Lischwe

Warmup $3/\left(10 \div \frac{1}{2}\right)$

1) Write down the formula for circumference of a circle without looking at your notes.
2) Write down the formula for area of a circle without looking at your notes.
3) If the area of the triangle is 36 m^2, find the height.



4) Explain a mental math way (not involving the reciprocal) of calculating today's date problem.

Go over both worksheets

- Blue worksheet: use the rubric to grade
- Yellow worksheet: graded for completion (as long as you fix your errors AND THE WORK in a different color)

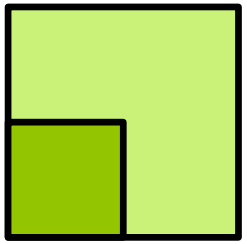
Problem Solving

- **Answer the following question with your group. You must support your answer with mathematical reasoning.**

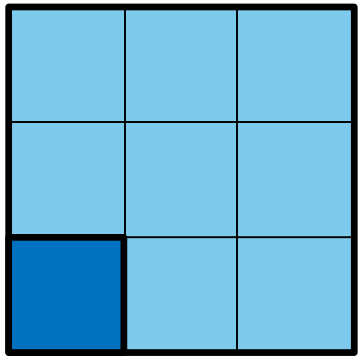
- **"At Pedro's pizza, an 8-inch pizza (the size of the pizza is the diameter) costs $6 and a 16-inch pizza costs $15. Which is the better deal?"**

A similar phenomenon…

- If you **double** the side lengths of a square, does the area double?

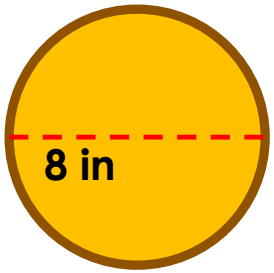


- If you **triple** the side lengths of a square, does the area triple?



Here's what the pizzas look like…

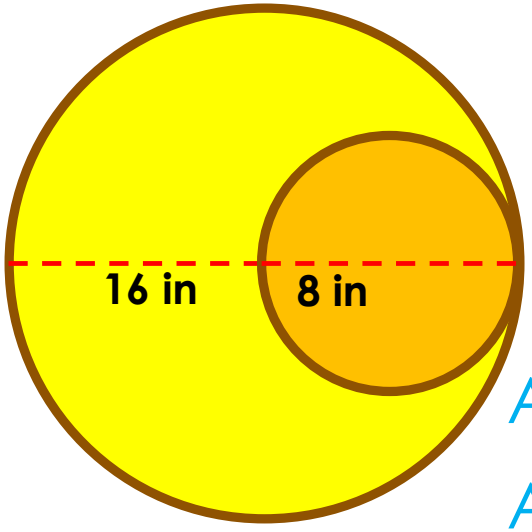
$6



Area = $\pi \cdot 4 \cdot 4$

Area = 16π

$15

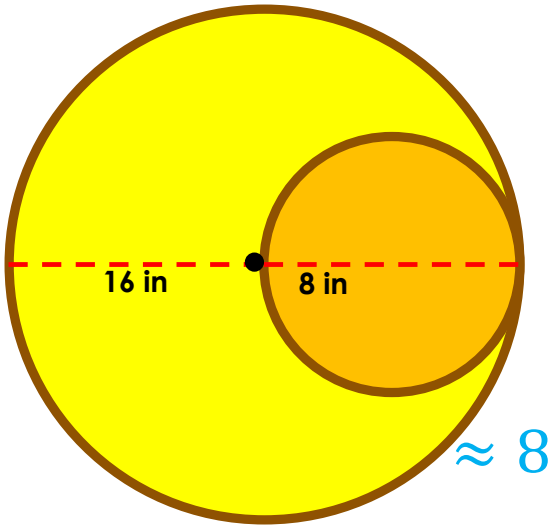


Area = $\pi \cdot 8 \cdot 8$

Area = 64π

Problem Solving

- At Pedro's pizza, an 8-inch pizza (the size of the pizza is the diameter) costs $6 and a 16-inch pizza costs $15. Which is the better deal?



8-inch

Radius = 4

$A = 16\pi$

$A \approx 50.3\ in^2$

$50.3 \div \$6$

$\approx 8.38\ in^2$ per dollar

16-inch

Radius = 8

$A = 64\pi$

$A \approx 201.1 in^2$

$201.1 \div \$15$

$\approx 13.4\ in^2$ per dollar

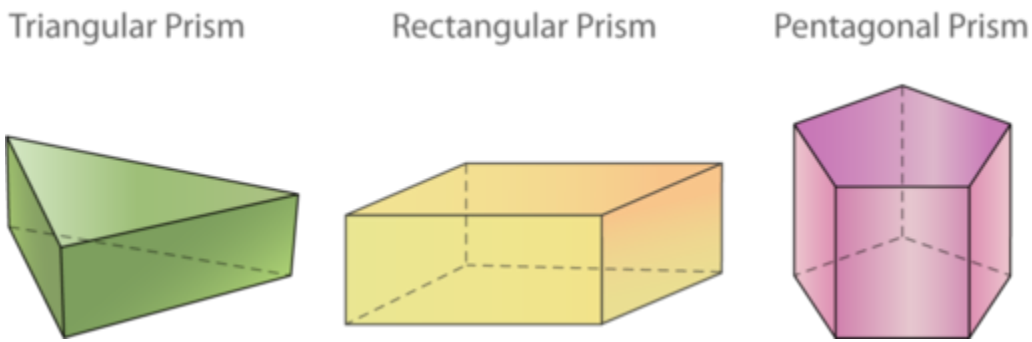
The table shows actual data from Pizza Hut. In your trios, rank the pizzas from best deal to worst deal. Be prepared to back up your claim with specific numbers!

Pizza Hut Pizzas (Actual store information)		
Size	**Diameter**	**Cost**
Personal	6"	$4.29
Medium	12"	$8.49
Large	14"	$10.49

Pizza Hut Pizzas (Actual store information)		
Size	**Diameter**	**Cost**
Personal	6"	$4.29
Medium	12"	$8.49
Large	14"	$10.49

Table of Contents (2nd Semester)

- A **prism** is a 3-dimensional shape with two parallel faces that are congruent.



- The two faces that are parallel are called **bases**.

In a prism…

- The bases can be any shape. The sides will be rectangles!!!