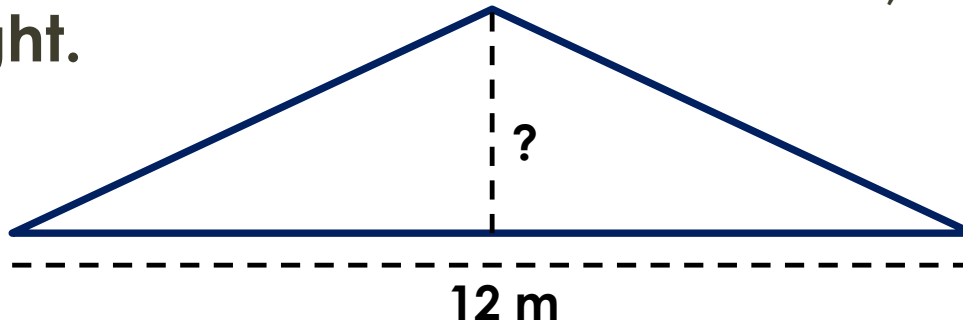


Created by Mr. Lischwe

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  $36 \text{ m}^2$ , find the height.



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

# Go over both worksheets

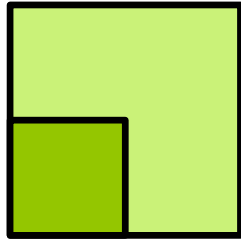
- Blue worksheet: use the rubric to grade
- Yellow worksheet: graded for completion (as long as you fix your errors AND THE WORK in a different color)

# Problem Solving

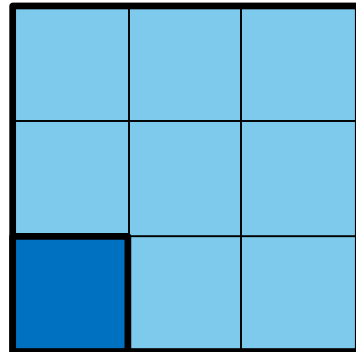
- Answer the following question with your group. You must support your answer with mathematical reasoning.
- “At Pedro’s pizza, an 8-inch pizza (the size of the pizza is the diameter) costs \$6 and a 16-inch pizza costs \$15. Which is the better deal?”

# A similar phenomenon...

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

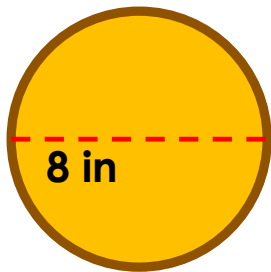


- If you **triple** the side lengths of a square, does the area triple?



Here's what the pizzas look like...

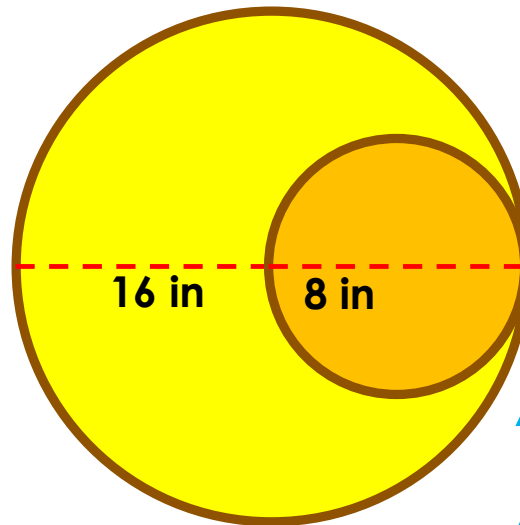
\$6



$$\text{Area} = \pi \cdot 4 \cdot 4$$

$$\text{Area} = 16\pi$$

\$15

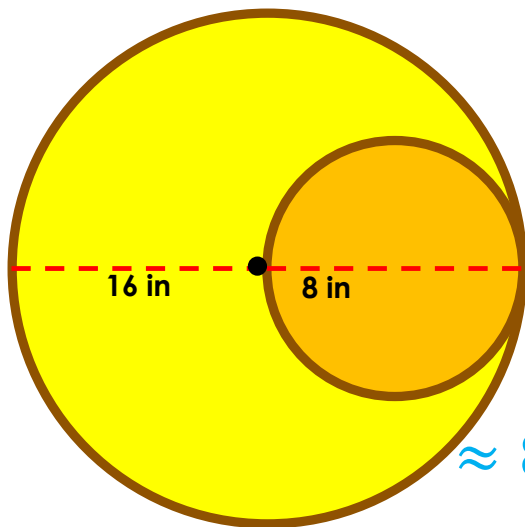


$$\text{Area} = \pi \cdot 8 \cdot 8$$

$$\text{Area} = 64\pi$$

# 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

$$A = 16\pi$$

$$A \approx 50.3 \text{ in}^2$$

$$50.3 \div \$6$$

$$\approx 8.38 \text{ in}^2 \text{ per dollar}$$

16-inch

Radius = 8

$$A = 64\pi$$

$$A \approx 201.1 \text{ in}^2$$

$$201.1 \div \$15$$

$$\approx 13.4 \text{ in}^2 \text{ per dollar}$$

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)**

<u>Size</u>	<u>Diameter</u>	<u>Cost</u>
Personal	6"	\$4.29
Medium	12"	\$8.49
Large	14"	\$10.49

**Pizza Hut Pizzas (Actual store information)**

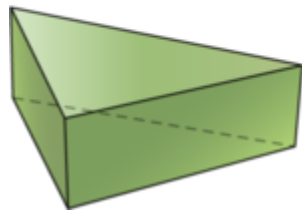
<u>Size</u>	<u>Diameter</u>	<u>Cost</u>			
Personal	6"	\$4.29			
Medium	12"	\$8.49			
Large	14"	\$10.49			

## Table of Contents (2<sup>nd</sup> Semester)

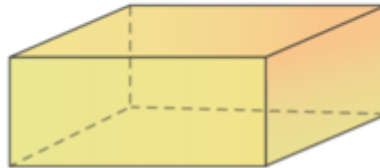
p. 1	Exponent Basics (1.2)
p. 2	Multiplying and Dividing Powers (1.3)
p. 3	Power to a Power (1.4)
p. 4	Zero & Negative Exponents (1.5)
p. 5	Scientific Notation (1.6)
p. 6	Calcluating with Scientific Notation (1.7)
p. 7	Angle Basics
p. 8	Angles formed by Parallel Lines (5.1)
p. 9	Transformations (6.1 – 6.3)
p. 10	Rotations (Handout)
p. 11	Reverse Transformations
p. 12	Pythagorean Theorem
p. 13	Distance on the Coordinate Plane (handout)
p. 14	Review: Circles
<b>p. 15</b>	<b>Volume of Prisms</b>

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

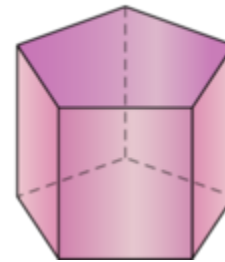
Triangular Prism



Rectangular Prism



Pentagonal Prism



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

# In a prism...

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

