

Warm-Up 2/6/17 (Calc. Inactive)

1) Solve.

$$-3(x - 6) + 4(x + 1) = 7x - 10$$

2) Classify the following as rational or irrational.

a) $\frac{3}{4}$

b) 0.143544362....

c) 2.34343434...

d) $\sqrt{64}$

e) $\sqrt{86}$

f) -4

3) Simplify.

$$(5 \times 10^7)(2.5 \times 10^{-2})$$

$$1) -3(x-6) + 4(x+1) = 7x - 10$$

$$-3x + 18 + 4x + 4 = 7x - 10$$

$$x + 22 = 7x - 10$$

$$22 = 6x - 10$$

$$32 = 6x$$

$$\frac{32}{6} = x$$

$$\frac{16}{3} = x$$

2 a) Rational

b) Irrational

c) Rational

d) Rational

e) Irrational

f) Rational

$$3) (5 \times 10^7)(2.5 \times 10^{-2})$$

$$(5 \cdot 2.5) \times (10^7 \cdot 10^{-2})$$

$$12.5 \times 10^5$$

$$1.25 \times 10^6$$

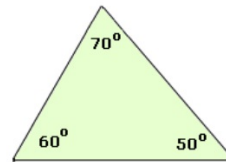
~Group Discussion: A triangle is a figure with only three sides. These sides form three angles. Try to draw as many different 3 sided figures as you can, and under each, write a short description of the figure.



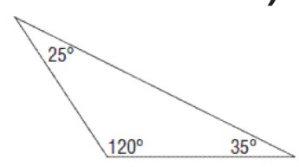
Pythagorean Theorem Introduction

Copy the following notes and answers to questions in your notebook.

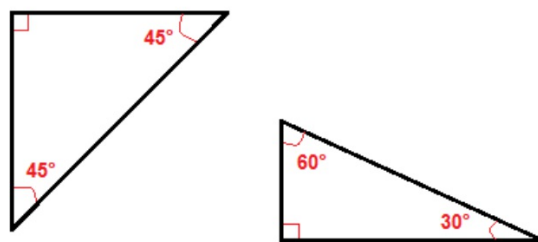
Acute Triangle: is a **triangle** with all three angles **acute** (less than 90°)



Obtuse Triangle: is one with one obtuse angle (greater than 90°) and two **acute** angles



Right Triangle: a triangle with a right angle.



Triangle's angles must sum to 180° , no **triangle** can have more than one obtuse angle.

Read: What's Your Angle Pythagoras?

<http://pythagorasreads.wikispaces.com/What%27s+Your+Angle,+Pythagoras%3F>

While you listen, answer the questions.

Pythagorean Theorem

Complete the following questions as your teacher reads What's Your Angle, Pythagoras? by Julie Ellis.

- Pythagoras' father transported _____ to Crete.
- Nef, the builder, showed Pythagoras a rope in which he had made a triangle. He called the triangle a _____ triangle because it helped him make a square corner which was exactly the right angle for cutting stone.
- Pythagoras found a rope and tied knots in it and pulled the rope into different triangles until he made a triangle that seemed right. It had _____ lengths on one side, _____ lengths on another side, and _____ lengths on the longest side.
- Pythagoras got in trouble when he used the tiles to make squares along each side of a statue base. It took _____ tiles to make a square along the side that was 3 tiles long, _____ tiles to make a square along the side that was 4 tiles long, and _____ tiles to make a square along the side that was 5 tiles long.
- Pythagoras used his right triangle pattern _____ (Pythagorean Theorem) to figure out the distance from his house to Crete.

In the space below, draw a diagram depicting the way you think Pythagoras placed the tiles around the statue base as described in the story.

http://digitalcommons.brockport.edu/cgi/viewcontent.cgi?article=1186&context=ehd_theses

Homework: Pythagoras Introduction Worksheet

If you need to listen/read the story again, use the link below:

<https://www.youtube.com/watch?v=c8z9oUP-pcs>