SEMESTER 2 FINAL

CHAPTER 7 REVIEW

Roots Review

Perfect Roots that you should know

$\sqrt{1}$	$\sqrt{49}$	$\sqrt{169}$
$\sqrt{4}$	$\sqrt{64}$	$\sqrt{196}$
$\sqrt{9}$	$\sqrt{81}$	$\sqrt{225}$
$\sqrt{16}$	$\sqrt{100}$	$\sqrt{256}$
$\sqrt{25}$	$\sqrt{121}$	$\sqrt{400}$
$\sqrt{36}$	$\sqrt{144}$	$\sqrt{625}$

Review

Find the two square roots of the number.

1. 36

2. 100

3. 121

Find the square root(s).

4. $-\sqrt{1}$

5. $\pm\sqrt{\frac{4}{25}}$

6. $\sqrt{12.25}$

Review

Evaluate each expression.

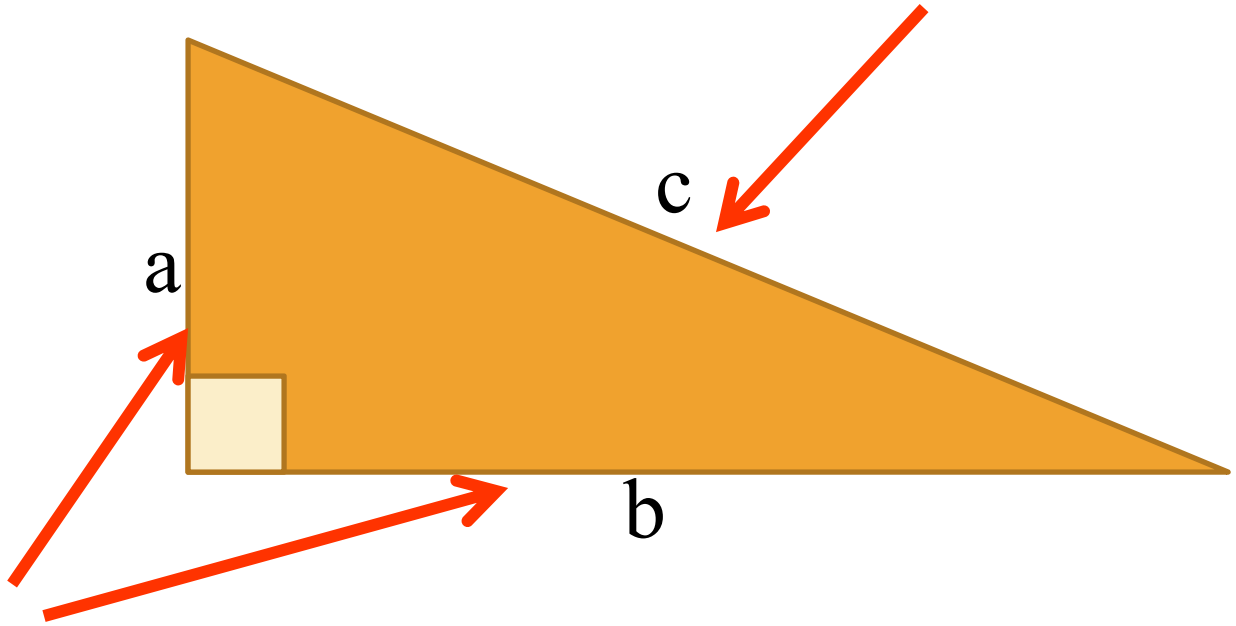
a. $2\sqrt{144} - 30$

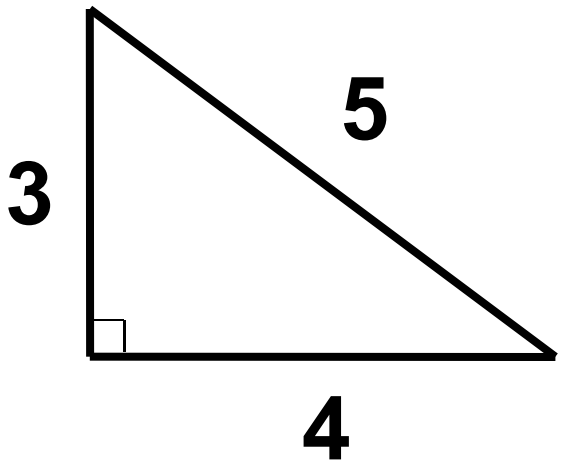
b. $\sqrt{\frac{36}{4}} + \frac{1}{6}$

Review

c. $49 - \left(\sqrt{49}\right)^2$

Parts of a Right Triangle



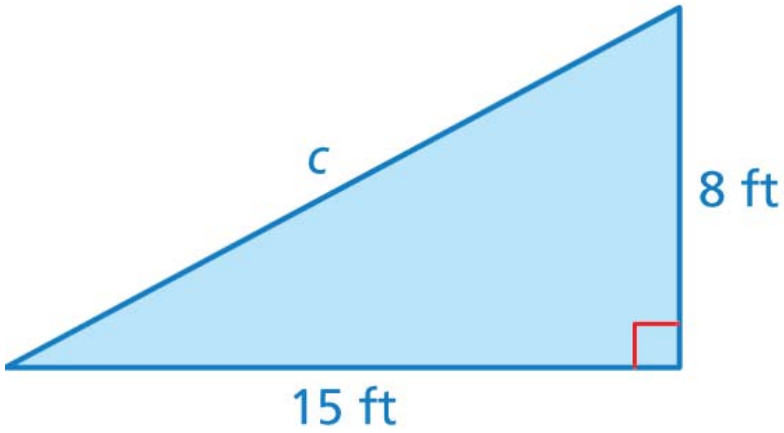


Pythagorean Theorem

If a triangle is a _____ triangle, then the sum of the squares of the sides is the equal to the square of the length of the _____.

Review

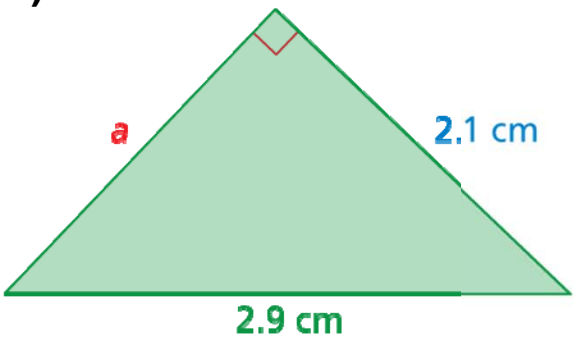
7) Find the length of the hypotenuse of the triangle.



Pythagorean Theorem

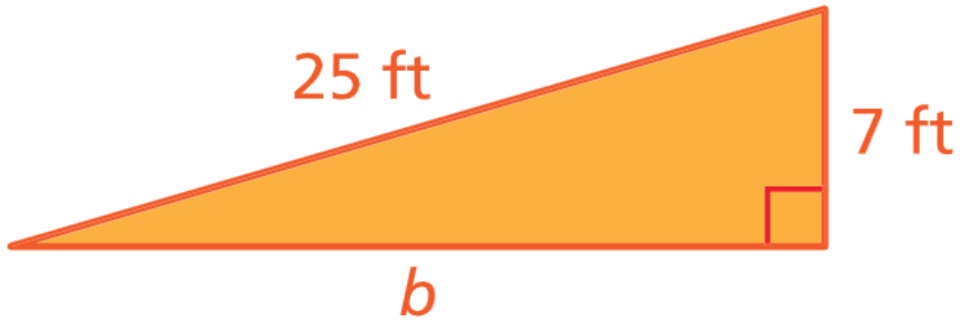
Find the missing length of the triangle.

8)



Pythagorean Theorem

9) Find the missing length of the triangle.

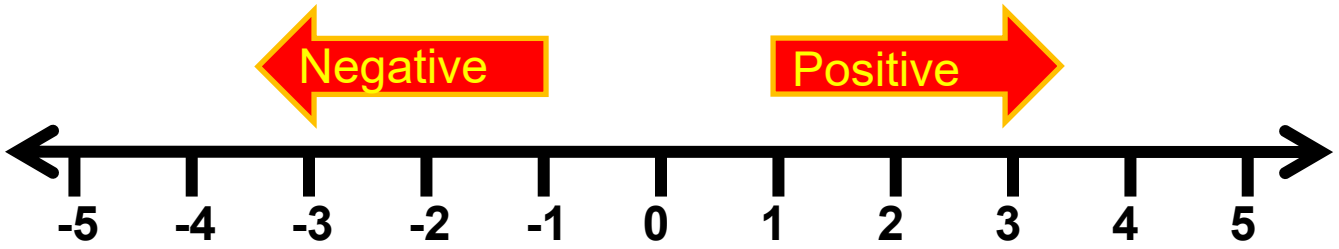


Kinds of Numbers

Natural Numbers

Whole Numbers

Integers



Rational Number

Irrational Numbers

- You CAN'T change the number into a fraction

- A decimal that goes on forever BUT doesn't repeat

- You CAN'T find the PERFECT square root of it

Review

Identify all sets to which each of the following numbers belong:

9) $\frac{1}{9}$

10) 0

11) -18

Review

Order these numbers from least to greatest:

$$-\frac{1}{2}, \frac{3}{4}, -0.05, 0.83$$

Approximating Square Roots

12) Estimate $\sqrt{71}$ to the nearest (a) integer and (b) tenth.

Approximating Square Roots

13) Estimate $\sqrt{23}$ to the nearest (a) integer and (b) tenth.

The Converse of the Pythagorean Theorem

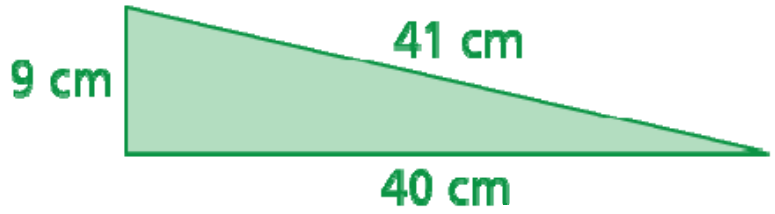
In a triangle if $a^2 + b^2 = c^2$ **works , then the triangle is a _____.**

Determine if the triangle with the given side lengths is a right triangle.

14) $11, 18, 21$

15) $5, 6, \sqrt{11}$

Tell whether each triangle is a right triangle.

16) 

17)