

Name _____ Period _____

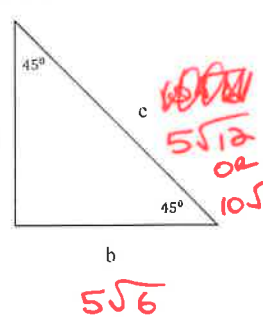
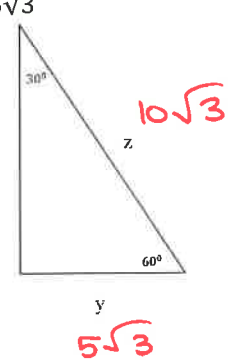
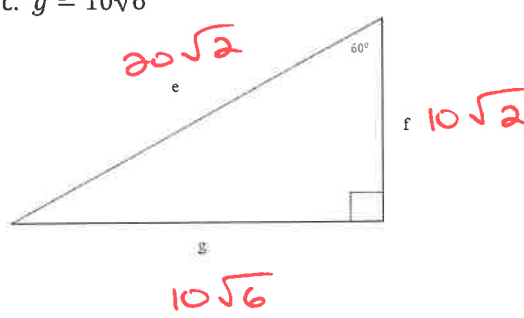
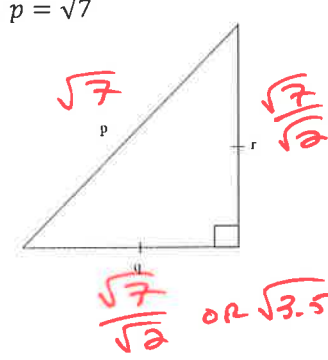
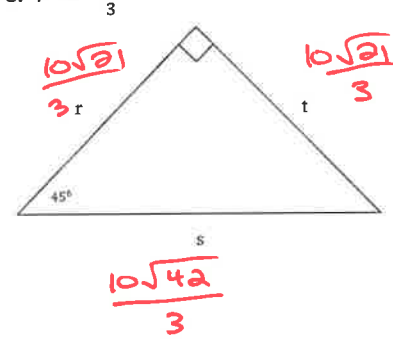
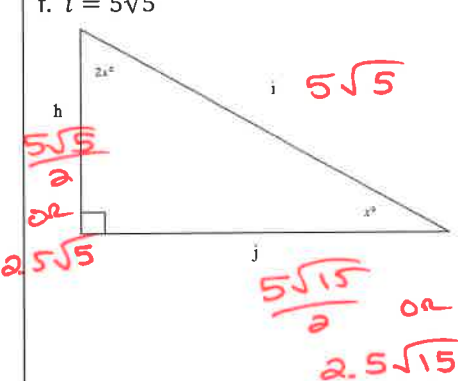
At the end of the quarter, your best three grades will be averaged and count as a 100 point test.

Topics on Quarter 4 Skills Quizzes (A Calculator is permitted on these 4th quarter skills quizzes.)

1. Solve Equation that is Already factored (5 pts.)			
a. $(x - 6)(x + 3) = 0$	b. $(x)(x + 9) = 0$	c. $(2x - 1)(x - 9) = 0$	d. $(3x + 7)(2x - 5) = 0$
$x = 6, -3$	$x = 0, -9$	$x = \frac{1}{2}, 9$	$x = -\frac{7}{3}, \frac{5}{2}$

a. Solve $x^2 - 10x = 39$ by either factoring and zpp, completing the square and solving, or the quadratic formula.	Solve $x^2 - 10x = 39$. $x = 13, -3$	Solve $x^2 - 10x = 39$.
b. Solve $x^2 - 8x = 33$ by either factoring and zpp, completing the square and solving, or the quadratic formula.	Solve $x^2 - 8x = 33$. $x = 11, -3$	Solve $x^2 - 8x = 33$.
c. Solve $x^2 - 4x = 21$ by either factoring and zpp, completing the square and solving, or the quadratic formula.	Solve $x^2 - 4x = 21$. $x = 7, -3$	Solve $x^2 - 4x = 21$.

3. Solving Special Right Triangles (6 pts.)

a. $b = 5\sqrt{6}$ 	b. $y = 5\sqrt{3}$ 	c. $g = 10\sqrt{6}$ 
d. $p = \sqrt{7}$ 	e. $r = \frac{10\sqrt{21}}{3}$ 	f. $i = 5\sqrt{5}$ 

4. Identify the Percent Increase and Decrease for each. (3 pts.)

a. $100 \rightarrow 140$ 40% inc	b. $100 \rightarrow 170$ 70% inc	c. $100 \rightarrow 200$ 100% inc
d. $80 \rightarrow 140$ 75% inc	e. $80 \rightarrow 200$ 150% inc.	f. $150 \rightarrow 160$ 6.6% inc

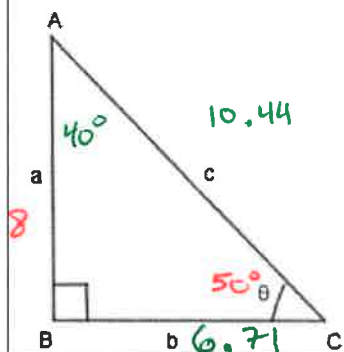
5. Solving The Right Triangle (6 pts.)

You will be given 3 bits of information about a triangle.

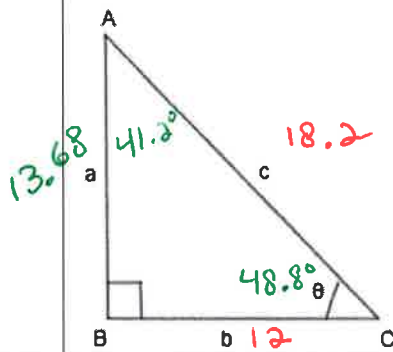
- A Right Angle
- A Side Length
- Either another Side Length or an Angle Measurement called Theta (θ)

Be aware that the triangle used for these questions is not necessary drawn to scale.

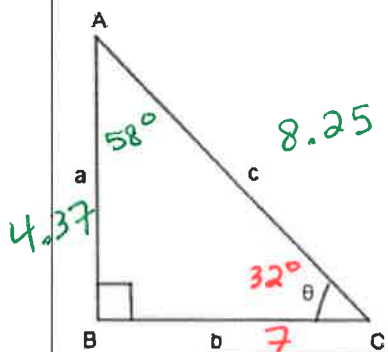
a. $a = 8, \theta = 50^\circ$



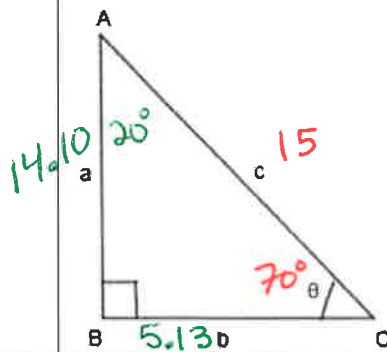
a. $b = 12, c = 18.2$



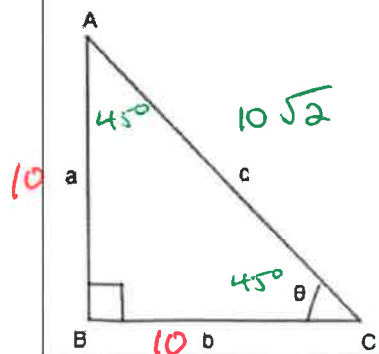
a. $b = 7, \theta = 32^\circ$



a. $c = 15, \theta = 70^\circ$



a. $a = 10, b = 10$



a. $b = 8, c = 16$

