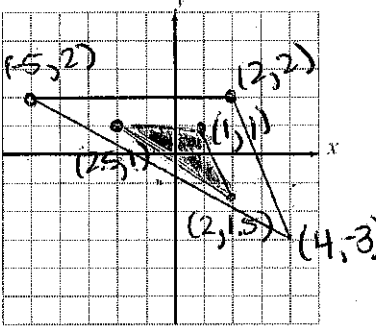
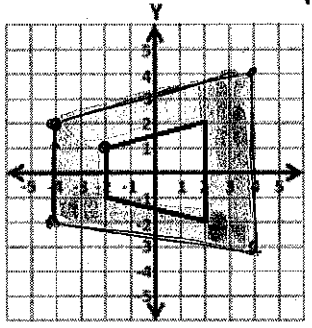
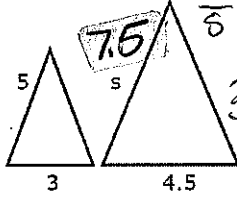
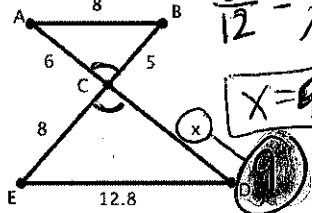
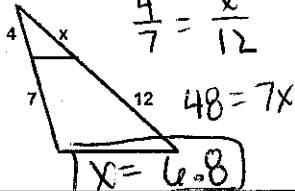
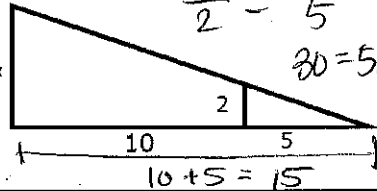
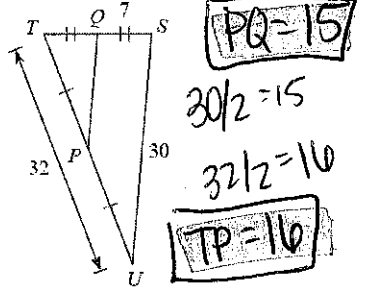
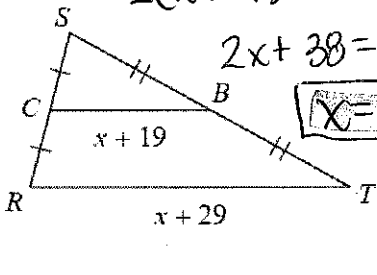
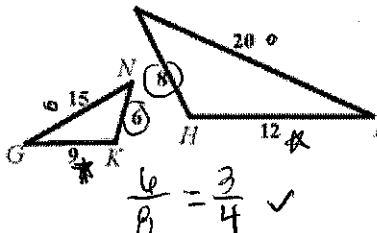
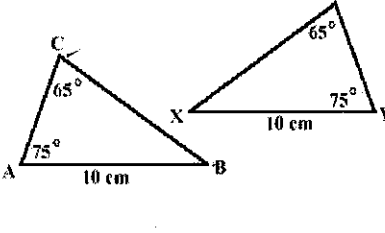


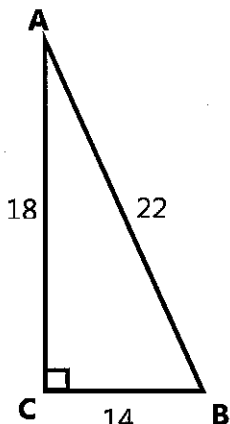
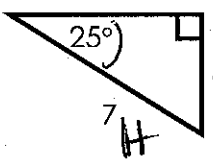
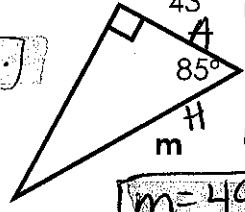
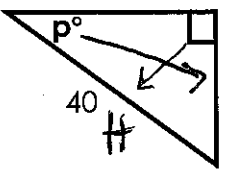
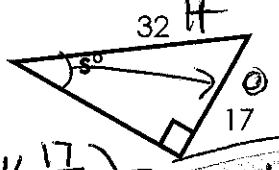

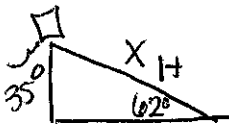
Name: Keris Key

Date: _____

Use the following to review for you test. Work the Practice Problems on a separate sheet of paper.

What you need to know & be able to do	Things to remember		
<p>A. Perform a dilation with a given scale factor</p>	<p>When the center of dilation is the origin, you can multiply each coordinate of the original figure, or pre-image, by the scale factor to find the coordinates of the dilated figure, or image.</p>	<p>1. Dilate with $k = \frac{1}{2}$.</p> 	<p>2. Dilate with $k = 2$.</p> <p>• multiply coordinates by 2 $(-2, 1) \rightarrow (-4, 2)$</p> 
<p>B. Find the missing side for similar figures.</p>	<p>Set up a proportion by matching up the corresponding sides. Then, solve for x.</p>	<p>3.</p>  <p>$\frac{5}{3} = \frac{7.5}{4.5}$ $3s = 22.5$</p>	<p>4.</p>  <p>$\frac{6}{8} = \frac{8}{12.8}$ $\frac{6}{12} = \frac{8}{x}$ $x = 9$</p>
	<p>$\frac{4}{11} = \frac{x}{x+12}$ $4x + 48 = 11x$</p>	<p>5.</p>  <p>$\frac{4}{7} = \frac{x}{12}$ $48 = 7x$ $x = 6.8$</p>	<p>6.</p>  <p>$\frac{x}{2} = \frac{15}{5}$ $30 = 5x$ $x = 6$</p>
<p>C. Midsegment Theorem</p>	<p>The segment connecting the midpoints of two sides of the triangle is parallel to the third side and $\frac{1}{2}$ the length of the third side.</p>	<p>5. Find PQ and TP</p>  <p>$PQ = 15$ $30/2 = 15$ $32/2 = 16$ $TP = 16$</p>	<p>6. Solve for x.</p>  <p>$2(x+19) = x+29$ $2x+38 = x+29$ $x = -9$</p>
<p>D. Determine if 2 triangles are similar, and write the similarity statement.</p>	<p>Remember the 3 ways that you can do this: AA, SAS, SSS</p>	<p>7. $\triangle GKN \sim \triangle LKH$ by SSS</p>  <p>$\frac{6}{8} = \frac{3}{4} \checkmark$</p>	<p>8. $\triangle ABC \sim \triangle XYZ$ by AA</p> 

$\frac{9}{12} = \frac{3}{4} \checkmark$
 $\frac{15}{20} = \frac{3}{4} \checkmark$

<p>E. Find sin, cos, and tan ratios</p>	<p>Just find the fraction using SOHCAHTOA</p>		<p>9. Find sin A. $\frac{O}{H} = \frac{14}{22} = \frac{7}{11}$</p> <p>10. Find tan B. $\frac{O}{A} = \frac{18}{14} = \frac{9}{7}$</p> <p>11. Find cos B. $\frac{A}{H} = \frac{14}{22} = \frac{7}{11}$</p> <p>12. Find tan A.</p>
<p>F. Know the relationship between the ratios for complementary angles.</p>	<p>$\sin \theta = \cos(90 - \theta)$ $\cos \theta = \sin(90 - \theta)$ $\tan \theta = \frac{1}{\tan(90 - \theta)}$</p>	<p>13. Given Right $\triangle ABC$ and $\sin \theta = 5/13$, find $\sin(90 - \theta)$ and $\cos(90 - \theta)$.</p> <p style="text-align: center; font-size: 2em;">OMIT</p>	
<p>G. Use trig to find a missing side measure</p>	<p>Set up the ratio and then use your calculator. If the variable is on the top, multiply. If the variable is on the bottom, divide.</p>	<p>14. Find f. $\sin(25^\circ) = \frac{f}{7}$ $7 \sin(25^\circ) = 3$ $f = 2.95$</p> 	<p>15. Find m. $\cos(85^\circ) = \frac{43}{m}$ $m = \frac{43}{\cos(85^\circ)} = 493.4$</p> 
<p>H. Use trig to find a missing angle measure</p>	<p>Tap the trig button twice to get the INVERSE then type in the ratio.</p>	<p>16. Find p. $\sin^{-1}(\frac{13}{40}) = p$ $p = 18.9^\circ$</p> 	<p>17. Find s. $\sin^{-1}(\frac{17}{32}) = s$ $s = 32.1^\circ$</p> 
<p>I. Trig Word Problems</p>	<p>Draw the picture. Label the sides. Set up the ratio, and solve.</p>	<p>18. From 25 feet away from the base of a building, the angle of elevation from the ground to the top of a building is measured to be 38°. How tall is the building? $\tan(38^\circ) = \frac{x}{25}$ $25 \tan(38^\circ) = x = 19.53$</p>  <p>19. A kite is 35 feet in the air and the string forms an angle of 62° with the ground. How long is the string? $\sin(62^\circ) = \frac{35}{x}$ $x = \frac{35}{\sin(62^\circ)} = 39.6$</p> 	

$a^2 + 43^2 = 493.4$

493.37