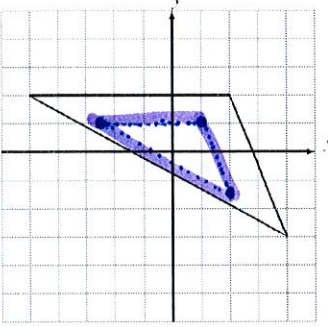
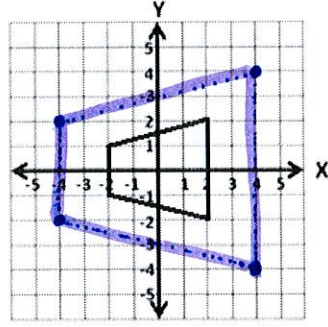
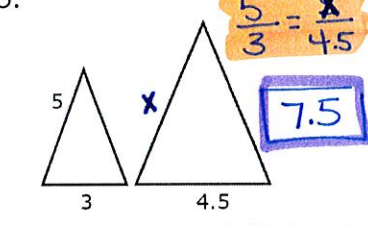
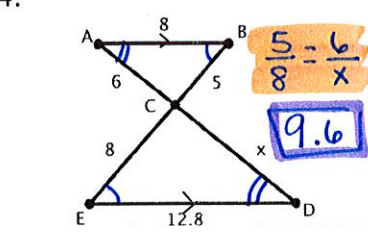
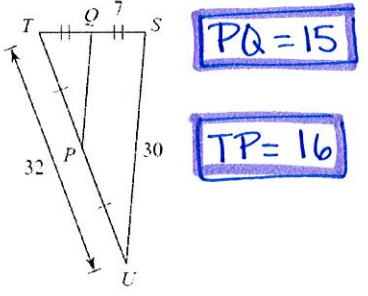
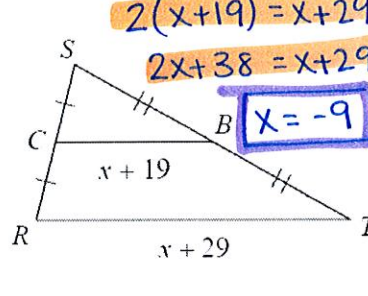
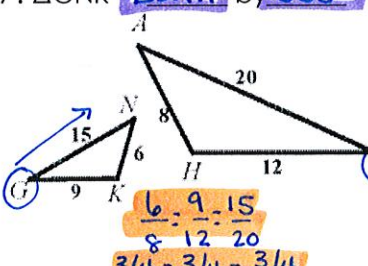
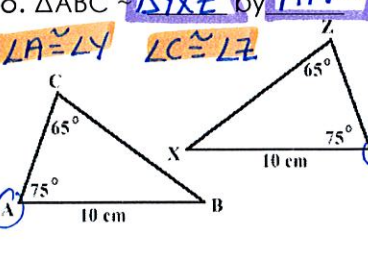
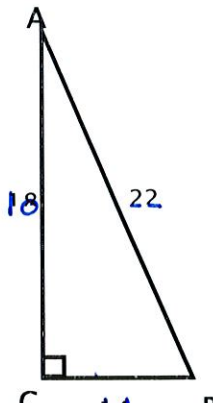
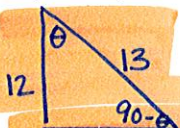
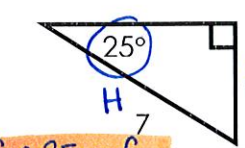
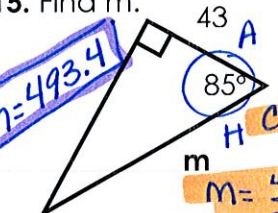
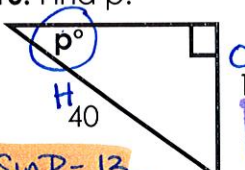
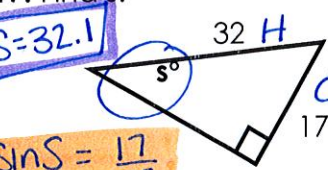
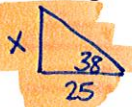
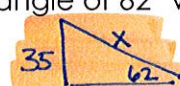
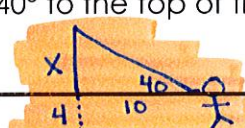


Name: _____ Date: _____

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

Topic	Things to remember	Examples	
<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>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>4.</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 1/2 the length of the third side.</p>	<p>5. Find PQ and TP</p> 	<p>6. Solve for x.</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. $\triangle GKN \sim \triangle AHL$ by SSS</p> 	<p>8. $\triangle ABC \sim \triangle XYZ$ by AA</p> 

<p>E. Find sin, cos, and tan ratios</p>	<p>Just find the fraction using SOHCAHTOA</p>		<p>9. Find sin A. $14/22$ $7/11$</p> <p>10. Find tan B. $18/14$ $9/7$</p> <p>11. Find cos B. $14/22$ $7/11$</p> <p>12. Find tan A. $14/18$ $7/9$</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 $\cos(90 - \theta)$. $x^2 + 5^2 = 13^2 \rightarrow x = 12$</p>  <p>$\sin(90 - \theta) = 12/13$ $\cos(90 - \theta) = 5/13$</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.</p>  <p>$\sin 25 = \frac{f}{7}$ $f = 7 \sin 25$ $f = 3$</p>	<p>15. Find m.</p>  <p>$m = 43 \cos 85$ $m = 43 \cos 85$</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.</p>  <p>$\sin P = \frac{13}{40}$ $P = \sin^{-1}(13/40)$ $P = 19$</p>	<p>17. Find s.</p>  <p>$\sin S = \frac{17}{32}$ $S = \sin^{-1}(17/32)$</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?</p>  <p>$\tan 38 = \frac{x}{25}$ $x = 25 \tan 38$ $x = 19.5$</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?</p>  <p>$\sin 62 = \frac{35}{x}$ $x = 35 / \sin 62$ $x = 39.6$</p> <p>20. Lucy, whose eye level is 4 feet from the ground, stands 10 feet away from the base of a tree. From her line of sight, she is looking at an angle of elevation of 40° to the top of the tree. How tall is the tree?</p>  <p>$\tan 40 = \frac{x}{10}$ $x = 8.4$ $10 \tan 40 = x$ $\text{tree} = 8.4 + 4 = 12.4$</p>	