Questions on test review? We will take our test in 10 minutes...get ready, grab a calculator, turn your desks into rows, get out your index card...

Apr 8-8:30 AM

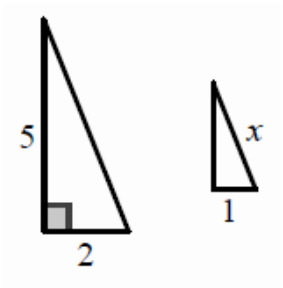
SECONDARY MATH II

Module 6 Study Guide: Similarity & Right Triangle Trigonometry

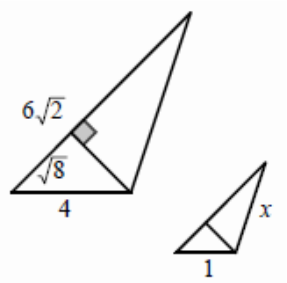
Directions: Show ALL work. Round any decimals to one decimal place, unless otherwise stated.

For 1-3: Find the missing side for the similar shapes that are shown below.

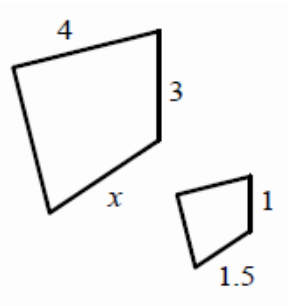
1.



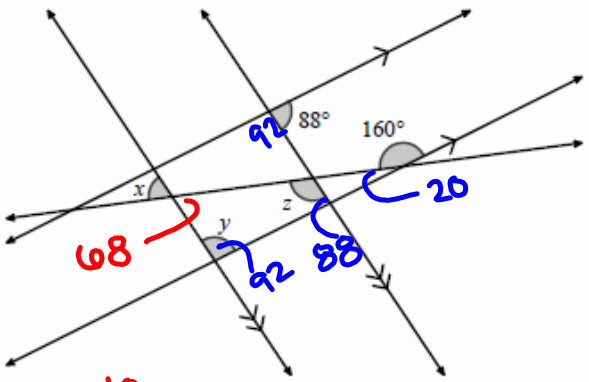
2.



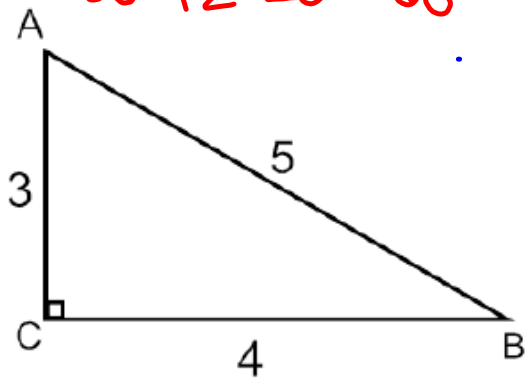
3.



4. Find the measurements of angles x, y, z.



5. Find the measure of all of the angles for the quadrilateral below, given ΔABC to the right.



$sinA =$

$cosA =$

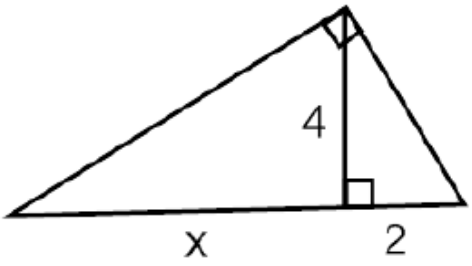
$tanA =$

$sinB =$

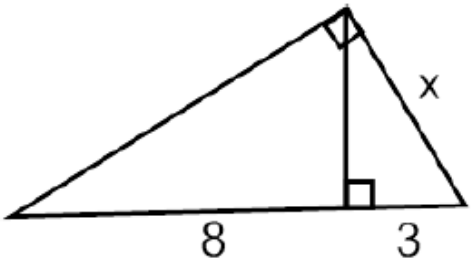
$cosB =$

$tanB =$

6. Set up a proportion and solve for x.

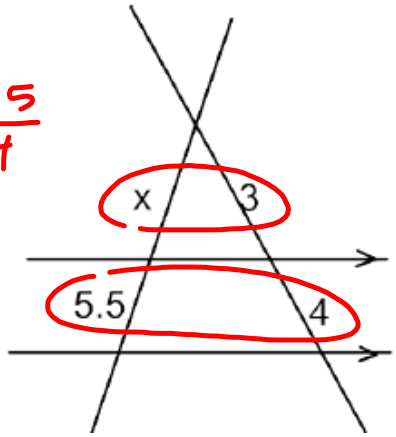


7. Set up a proportion and solve for x.

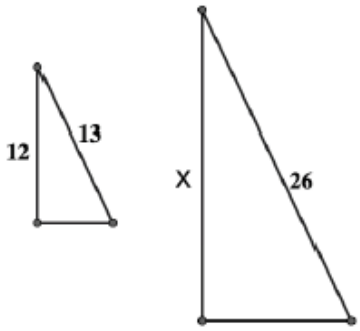


8. Set up a proportion and solve for x.

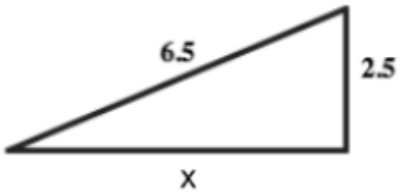
$\frac{x}{3} = \frac{5.5}{4}$



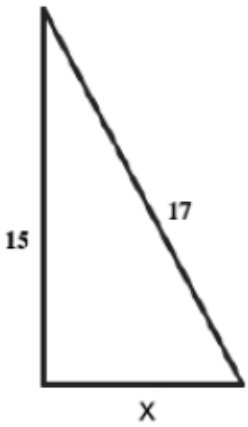
9. Set up a proportion and solve for x.



10. Find the missing side length, x.



11. Find the missing side length, x.



12. Find the coordinates of the midpoint, M, of a line segment between (0,6) and (8,2).

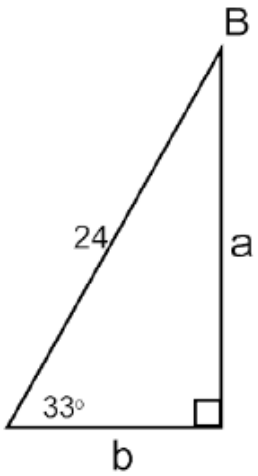
13. Find the coordinates of the midpoint, M, of a line segment between (-4,5) and (3,-6).

Mar 20-2:01 PM

14. Find all missing side lengths and angle measures.
$m\angle B =$

$a =$

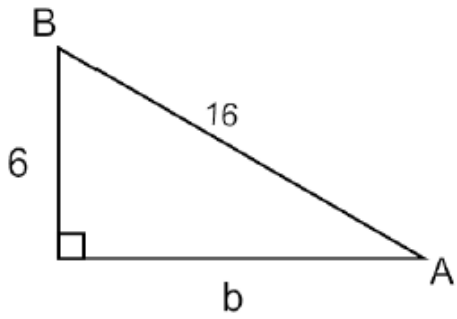
$b =$



15. Find all missing side lengths and angle measures.
$m\angle A =$

$m\angle B =$

$b =$



Find the missing angle or side length given the trigonometric ratio below.

16. $sinB = 0.67$

$\sin^{-1}(\sin B) = \sin^{-1}(0.67)$

$B = \sin^{-1}(0.67)$

$B = 42.1^{\circ}$

17. $\cos(53°) = \frac{x}{6}$

$6 \cdot \cos 53 = x$

$3.6 = x$

18. $tanA = 1.2$

For the following, draw a picture, set up a trig ratio, and solve for the missing angle or side length.

19. John places a 12 foot ladder against the side of a building. If the ladder makes an angle of elevation with the ground of 62°, how far up the side of the building is the ladder?

20. In southern Utah, there is a 10 mile stretch of I-15 that increases 1.6 miles. What is the angle of elevation?