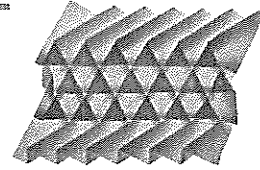


Name: _____ Similarity & Right Triangle Trigonometry | 6.9

Ready, Set, Go!



Ready

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Topic: Solving equations and proportions.

Just review your algebra skills! Don't worry about the justifications

Solve each equation below and ~~justify your work.~~

1. $8x - 10 = x + 11$ | Justification

--	--

2. $3x + 9 = 44 - 2x$ | Justification

--	--

3. $\frac{3}{5}x = 9$ | Justification

--	--

4. $\frac{2}{3} = \frac{x}{21}$ | Justification

--	--

Set

Topic: Trigonometric Ratios and Connections between them.

Based on the given trigonometric ratio, sketch a triangle and find a possible value for the missing side as well as the other missing trig ratios. Angles A and B are the two non-right angles in a right triangle.

5. a. $\tan(A) = \frac{3}{4}$

b. $\sin(A) =$

c. $\cos(A) =$

d. $\tan(B) =$

e. $\sin(B) =$

f. $\cos(B) =$

6. a. $\tan(A) =$

b. $\sin(A) =$

c. $\cos(A) =$

d. $\tan(B) =$

e. $\sin(B) = \frac{8}{17}$

f. $\cos(B) =$

g. Sketch of Triangle:

g. Sketch of Triangle:



Similarity & Right Triangle Trigonometry | 6.9

7. a. $\tan(A) =$

b. $\sin(A) =$

c. $\cos(A) = \frac{12}{13}$

d. $\tan(B) =$

e. $\sin(B) =$

f. $\cos(B) =$

g. Sketch of Triangle:

8. a. $\tan(A) =$

b. $\sin(A) =$

c. $\cos(A) =$

d. $\tan(B) =$

e. $\sin(B) = \frac{1}{\sqrt{2}}$

f. $\cos(B) =$

g. Sketch of Triangle:

#9-11 Honors Only

Given a right triangle with angles A and B as the non-right angles. Determine if the statements below are true or false. Justify your reasoning and show your argument.

9. $\cos(A) = \frac{1}{\sin A}$

10. $\tan(B) = \tan(90^\circ - A)$

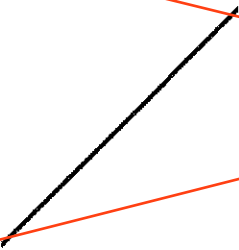
11. $\tan(A) \cdot \cos(A) = \sin(A)$

Go

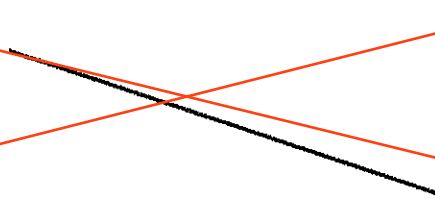
Topic: Slope as a ratio

On each grid draw three slope defining triangles of different sizes and label the rise and run then write the slope of the line.

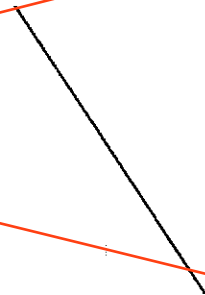
12.



13.

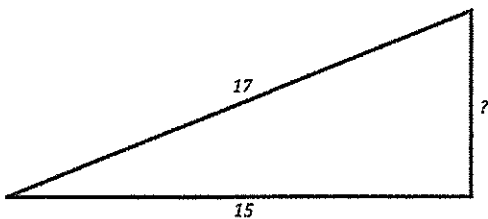


14.

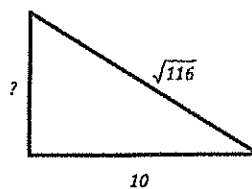


Find the missing length in each right triangle. Then determine the slope of the hypotenuse.

15.



16.



17.

