

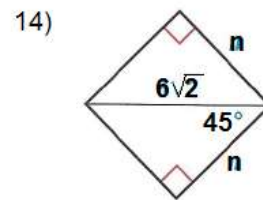
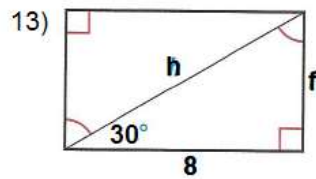
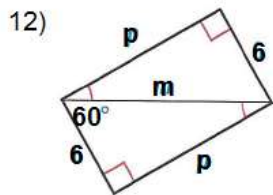
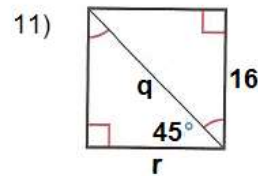
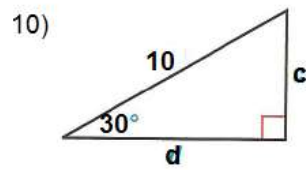
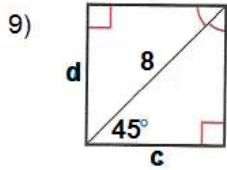
Special Right Triangle HOMEWORK

FEB 11, 2014

Part 1: Square Root Practice Simplify the square roots. Do not use a calculator.

1. $\sqrt{48}$	2. $\sqrt{98}$	3. $\sqrt{54}$	4. $\sqrt{32}$
5. $\frac{4}{\sqrt{3}}$	6. $\frac{35}{\sqrt{5}}$	7. $\frac{\sqrt{5}}{\sqrt{20}}$	8. $\frac{\sqrt{2}}{\sqrt{3}}$

Part 2: Find the values of the variables $c, d, f, h, m, n, p, q, r$ using the special right triangle relationships.



Part 3:

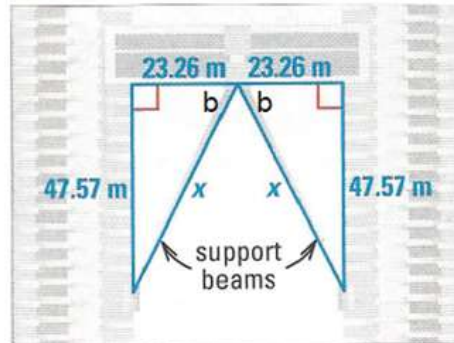
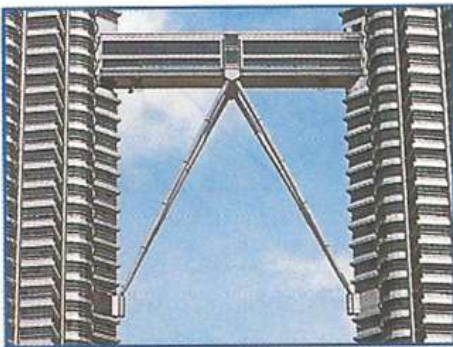
15) A tipping platform is a ramp used to unload trucks. If the ramp (as shown in the picture below) is 80 feet long, how high is the end of the ramp when the angle of elevation is:



- a) 30 degrees? b) 45 degrees? c) 60 degrees?

16) The skyscrapers shown on the left are connected by a skywalk with support beams that form the hypotenuses of congruent right triangles.

a) Find the length of the support beams.



- b) IF angle b was 60 degrees, and half the skywalk distance is 23.26 m, THEN ...
 how long should the vertical distance be?
 how long should the support beam be?

Based on these distances and the distances in the picture, is angle b larger or smaller than 60 degrees?

