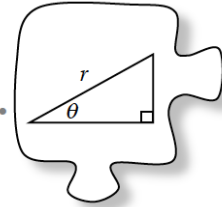


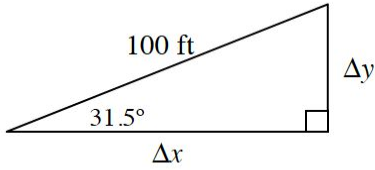
4.2.1 What if I know the hypotenuse?

Sine and Cosine Ratios



4-56 - The Streets of San Francisco

Can a tangent ratio be used to solve for Δy ? Why or why not?

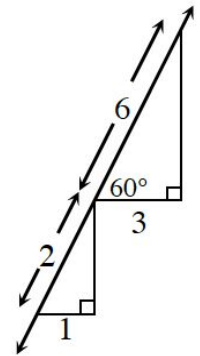


Juanisha's Drawing

4-57

a) Use two different strategies to determine Δy for the slope triangles shown in the diagram at right.

Strategy 1:	Strategy 2:
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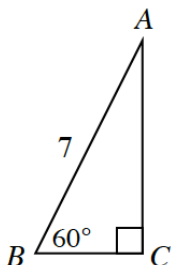


b) Create a ratio for $\frac{\Delta x}{\text{hypotenuse}}$ for each triangle above.

Ratio for $\Delta 1$:	Ratio for $\Delta 2$:
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b^{1/2}) Why must these ratios be equal?

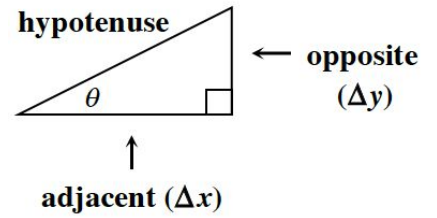
c) Determine BC and AC in the triangle below. Show all work.



AC =
BC =

4-60

For each triangle below, decide which side is *opposite* and which side is *adjacent* to the given acute angle. Then, determine which of the trig ratios to help you solve for x . Then solve for x . Show all work.



	Equation / Calculation:	Answer:
	Equation / Calculation:	Answer:
	Equation / Calculation:	Answer:
	Equation / Calculation:	Answer:
	Equation / Calculation:	Answer:
	Equation / Calculation:	Answer: