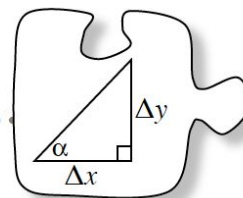


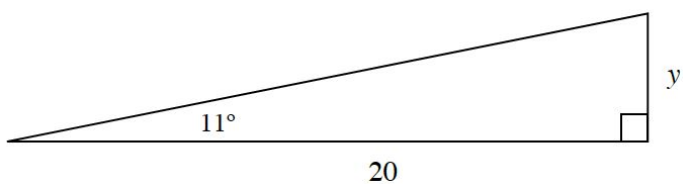
3.2.2 How important is the angle?

Connecting Slope Ratios to Specific Angles



trigonometry: the study of the measures of triangles

3-78

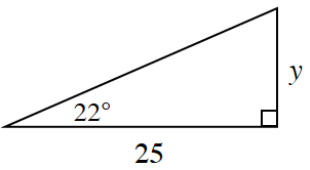
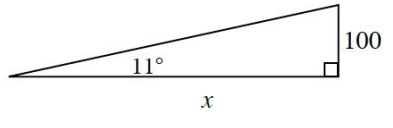
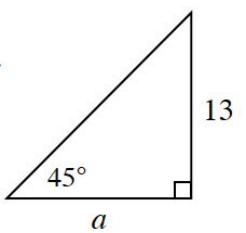


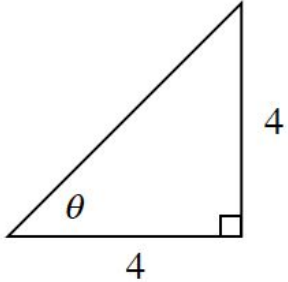
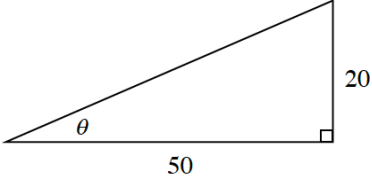
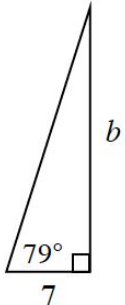
Slope ratio =
Slope angle = 11°

Solve for y . Show your work.

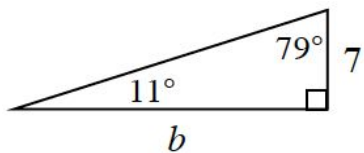
3-79 - Application

Determine the missing angle measure or side length. Use your work from Lesson 3.2.1 to help you.

a) 	b) 	c) 
a) Expression / Calculation: $y = \underline{\hspace{2cm}}$	b) Expression / Calculation: $x = \underline{\hspace{2cm}}$	c) Expression / Calculation: $a = \underline{\hspace{2cm}}$

<p>d)</p> 	<p>e)</p> 	<p>f)</p> 
<p>d) Expression / Calculation:</p> $\theta = \underline{\hspace{2cm}}$	<p>e) Expression / Calculation:</p> $\theta = \underline{\hspace{2cm}}$	<p>f) Expression / Calculation:</p> $b = \underline{\hspace{2cm}}$

3-80 - Sheila

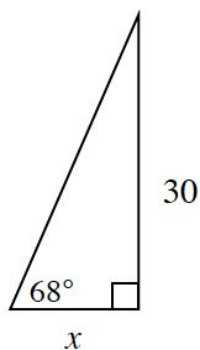


a) Do you agree with Sheila? Why or why not?

b) Using what you know about the slope ratio of 11° , determine the slope ratio of 79° .

c) What is the relationship of 11° and 79° ? What is the relationship between their slope ratios?

3-81 - Extra Practice



a) Since you know the slope ratio for 22° , what other angle do you know the slope ratio for? Use tracing paper to determine a slope ratio for the complement of each slope angle you know.

b) Use this information to determine the value of x in the diagram.

c) Write a conjecture about the relationship of the slope ratios for complementary angles. You may want to start with, "If one angle of a right triangle has the slope ratio

$\frac{a}{b}$, then ..."