Geometry Notes   **Section 7-1: Ratios and Proportions**

*Objective:

*<u>ratio</u>:

*<u>extended ratio</u>:

Got It? **1.** A bonsai tree is 18 in. wide and stands 2 ft tall. What is the ratio of the width of the bonsai to its height?	
Got It? **2.** The measures of two supplementary angles are in the ratio 1 : 4. What are the measures of the angles?	
Got It? **3.** The lengths of the sides of a triangle are in the extended ratio 4 : 7 : 9. The perimeter is 60 cm. What are the lengths of the sides?	

*<u>proportion</u>:	*Example showing <u>Extremes</u> and <u>Means</u>

*Cross Products Property		
*Words	*Symbols	*Example

Got It? **4.** What is the solution of each proportion?

b. $\dfrac{15}{m+1} = \dfrac{3}{m}$

*Properties of Proportions	
*Property	*How to Apply It
(1)	
(2)	
(3)	

Got It? **5.** For parts (a) and (b), use the proportion $\dfrac{x}{6} = \dfrac{y}{7}$. What ratio completes the equivalent proportion? Justify your answer.

a. $\dfrac{6}{x} = \dfrac{\blacksquare}{\blacksquare}$

b. $\dfrac{\blacksquare}{\blacksquare} = \dfrac{y+7}{7}$

In-class: p. 436-438 #16, 42, 46, 50
Homework: p. 436-438 #9-49 (odds only), not #39b or 45
Interactmath: #11, 13, 15, 17, 21, 23, 27, 29, 33, 37, 43, 49