

Algebra Bellwork - October 21, 2011

Solve the following proportions:

$$\frac{3}{12} \quad \frac{5}{20}$$
$$\frac{1}{4} \quad \frac{1}{4}$$

$$\frac{\cancel{3}}{12} \neq \frac{5}{20}$$

$$\frac{7}{21} \neq \frac{8}{n}$$

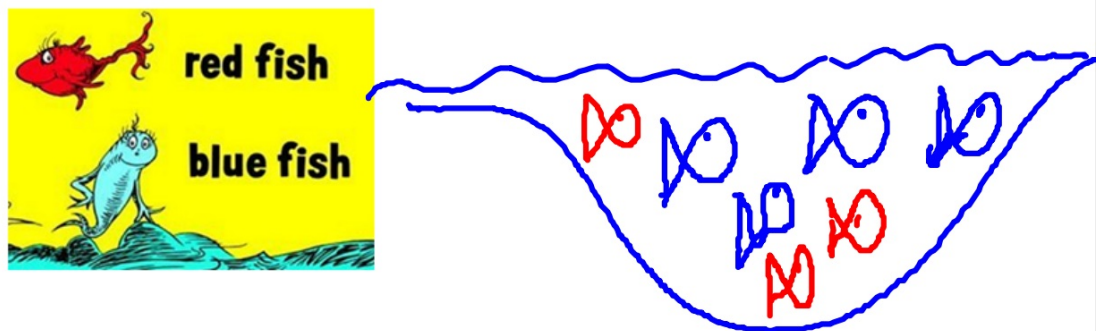
$$\frac{20x}{20} = \frac{60}{20}$$

$$x = 3$$

$$\frac{7n}{7} = \frac{168}{7}$$

$$n = 24$$

Objective: Today we will use **proportions** to estimate animal populations in the wild.



Language Objective: Today we will verbally explain with a partner how we used proportions to solve the fish pond problem.

The brown paper bag is your pond. It only contains blue fish.

- 1) Count how many red fish you have and put them into the pond
- 2) Without looking, take out a small sample and count the number of each color fish.

	# RED FISH	# BLUE FISH	RATIO RED/BLUE FISH	ESTIMATED BLUE FISH POPULATION
1.	4	11	$\frac{4}{11}$	$\frac{4}{11} = \frac{20}{X}$ $\frac{4x}{4} = \frac{220}{4}$ $X = 54$
2.	3	10	$\frac{3}{10}$	$\frac{3}{10} = \frac{20}{X}$ $3x = 200$ $X = 67$ $X = 67$
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				