Ratio and Proportion

Review 7.1

EX 1: Converting Units.

12 cm

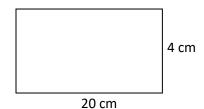
2) $\frac{3 \text{ yd.}}{6 \text{ ft.}}$

3) A flagpole is 18 ft. tall. A golf flag is 48 in.

EX 2: Writing Ratios.

4) Find the width to length ratio of each rectangle. Then simplify the ratio.

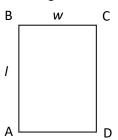




6) The senior class has 560 students. Write the ratio of boys to girls in simplest form if there are 268 girls.

EX 3: Using Ratios.

7) The perimeter of rectangle *ABCD* is 60 cm. The ratio of *AB:BC* is 3:2. Find the length and width of the rectangle.



- 8) Two complementary angles have a ratio of 11: 4. Find the measures of the two angles.
- 9) You are helping to decorate the gym for the homecoming dance. There must be a ratio of 5 black balloons to every 7 gold balloons. If you ordered 216 balloons. How many black balloons will be in the gym?

EX 4: Extended Ratios (Comparing more than two items)

- 10) The measure of the angles in ΔJKL are in the extended ratio of 1:2:3. Find the measures of the angles.
- 11) The measures of the angles in a triangle are in the extended ratio 3:4:8. Find the measures of the angles.

12) The perimeter of the isosceles triangle shown is 56 in. The ratio of LM:MN is 5:4. Find the lengths of the sides and the base of the triangle.



EX 5: Solving Proportions.

13) Solve:
$$\frac{2}{7} = \frac{6}{x}$$

14) Solve:
$$\frac{x-6}{4} = \frac{x}{10}$$

$$_{15)}\frac{x-9}{15} = \frac{2x-9}{10}$$

$$16) \frac{x-16}{x+6} = \frac{3}{5}$$