$\qquad$
$\qquad$ Period: $\qquad$

## Ratio and Proportion

EX 1: Converting Units.

1) $\frac{12 \mathrm{~cm}}{4 \mathrm{~m}}$
2) $\frac{3 \mathrm{yd}}{6 \mathrm{ft}}$.
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.
5) $\frac{224}{476}$

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 $A B C D$ is 60 cm . The ratio of $A B: B C$ 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?
$\qquad$ Date: $\qquad$ Period: $\qquad$

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

10) The measure of the angles in $\Delta J K L$ 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 $L M: M N$ 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) $\frac{x-9}{15}=\frac{2 x-9}{10}$
16) $\frac{x-16}{x+6}=\frac{3}{5}$

