Name: _____ Date: _____

Learning Goal 6.2	Solving equations, identifying any non-permissible values and extraneous roots.

Expressions **vs.** **Equations**

Example Solve the following rational equations. State any non – permissible values and/or extraneous roots.

a. $\frac{5}{x+4} = \frac{3}{x-2}$

b. $\frac{x+2}{x-3} = \frac{x-1}{x-2}$

c. $\frac{2}{z^2-4}+\frac{10}{6z+12}=\frac{1}{z-2}$

d. $\frac{4k-1}{k+2}-\frac{k+1}{k-2}=\frac{k^2-4k+24}{k^2-4}$

Example The measure, d degrees, of each angle in a regular polygon with n sides is given by the equation

$$d=180-\frac{360}{n}.$$

a. What is the measure of each angle in a regular polygon with 15 sides?

b. When each angle in a regular polygon is $162°$, how many sides does the polygon have?