Section 11.3 Worksheet

Name: _____

Simplify the expression, if possible.

1.) $\dfrac{7x}{21}$

2.) $\dfrac{48x^5}{18x^2}$

3.) $\dfrac{18x^2}{12x}$

4.) $\dfrac{x}{15 + x}$

5.) $\dfrac{m^2}{m(m + 1)}$

6.) $\dfrac{12b(4 - b)}{6b^3}$

7.) $\dfrac{14x}{7x^2 - 21x^3}$

8.) $\dfrac{5x}{x^2 + 3x}$

9.) $\dfrac{2x^2 + x}{4x}$

10.) $\dfrac{x^2 - 1}{6x + 6}$

11.) $\dfrac{4x - 12}{x^2 - 9}$

12.) $\dfrac{x^2 + 5x + 4}{3x + 12}$

13.) $\dfrac{x^2 - 4}{x^2 + 7x + 10}$

14.) $\dfrac{x^2 - 13x + 42}{x^2 + 3x + 2}$

15.) $\dfrac{2x^2 + 5x + 3}{4x^2 + 4x - 3}$

REVIEW:

Solve by using cross multiplication.

16.) $\dfrac{6}{2p} = \dfrac{5}{8}$

17.) $\dfrac{x}{x+4} = \dfrac{2}{x}$

Using the given values of x and y and the type of variation listed, write an equation that relates x and y.

18.) $x = 36, \; y = 54$; directly

19.) $x = 4.2, \; y = 6$; inversely