

Simplifying Rational Expressions Homework

Date _____ Period _____

© 2012 Kuta Software LLC. All rights reserved.

Simplify each expression.

1) $\frac{15x}{6x^2}$

2) $\frac{30x^2}{25x}$

3) $\frac{60}{18n + 42}$

4) $\frac{k - 9}{k^2 - 7k - 18}$

5) $\frac{56p + 8}{56p - 80}$

6) $\frac{x^2 - 9x - 10}{x^2 - 5x - 50}$

7) $\frac{x^2 + 12x + 35}{3x^4 + 9x^3 - 30x^2}$

8) $\frac{6n^2 + 18n}{2n^2 - 8n - 42}$

Simplifying Rational Expressions Homework

Date _____ Period _____

© 2012 Kuta Software LLC. All rights reserved.

Simplify each expression.

1) $\frac{15x}{6x^2}$

$$\frac{5}{2x}$$

2) $\frac{30x^2}{25x}$

$$\frac{6x}{5}$$

3) $\frac{60}{18n + 42}$

$$\frac{10}{3n + 7}$$

4) $\frac{k - 9}{k^2 - 7k - 18}$

$$\frac{1}{k + 2}$$

5) $\frac{56p + 8}{56p - 80}$

$$\frac{7p + 1}{7p - 10}$$

6) $\frac{x^2 - 9x - 10}{x^2 - 5x - 50}$

$$\frac{x + 1}{x + 5}$$

7) $\frac{x^2 + 12x + 35}{3x^4 + 9x^3 - 30x^2}$

$$\frac{x + 7}{3x^2(x - 2)}$$

8) $\frac{6n^2 + 18n}{2n^2 - 8n - 42}$

$$\frac{3n}{n - 7}$$