Simplifying Rational Expressions

1. Find the value(s) for which the rational expression is undefined.
(similar to p.445 #34)

$$\frac{7x-1}{2x+5}$$

2. Find the value(s) for which the rational expression is undefined.
(similar to p.445 #40)

$$\frac{8x-3}{x^3-7x^2+12x}$$

3. Simplify each rational expression. Assume that no variable has a value which results in a denominator with a value of zero.
(similar to p.445 #42)

$$\frac{4x+16}{4}$$

4. Simplify each rational expression. Assume that no variable has a value which results in a denominator with a value of zero.
(similar to p.445 #44)

$$\frac{10x^3-5x^2}{5x^2}$$

5. Simplify each rational expression. Assume that no variable has a value which results in a denominator with a value of zero.
(similar to p.445 #46)

$$\frac{x+5}{x^2+17x+60}$$

6. Simplify each rational expression. Assume that no variable has a value which results in a denominator with a value of zero.
(similar to p.445 #48)

$$\frac{9-x}{x-9}$$

7. Simplify each rational expression. Assume that no variable has a value which results in a denominator with a value of zero.
(similar to p.445 #50)

$$\frac{6x^3-30x^2}{15-3x}$$

8. Simplify each rational expression. Assume that no variable has a value which results in a denominator with a value of zero.
(similar to p.445 #52)

$$\frac{x^2-25}{x^2+13x+40}$$