

SECTION 1

Multiply and Divide Rational Expressions

Simplify.

1. $\frac{15x+20}{3x+4} * \frac{x+4}{5}$

$$= \boxed{x+4}$$

3. $\frac{2x^2-11x+12}{7x^2-76x+60} * \frac{49x-42}{2x-3}$

$$= \boxed{\frac{7x-28}{x-10}}$$

2. $\frac{x+8}{5x+1} \div \frac{60x^2}{5x+1}$

$$= \boxed{\frac{x+8}{60x^2}}$$

4. $\frac{7x-8}{14x^2-72x+64} \div \frac{30}{10x-40}$

$$= \boxed{\frac{1}{6}}$$

SECTION 2

Solve each Rational Equation

5. $\frac{1}{x+4} = \frac{1}{x^2+4x}$

$$\boxed{x=1}$$

7. $\frac{x^2+7x+12}{4} = \frac{x+3}{0.8}$

$$\boxed{x=-3 \text{ and } 1}$$

6. $\frac{2}{4x-3} + 1 = 6$

$$\boxed{x=0.85}$$