

Directions: Simplify the following functions.

1. $\frac{12x+18}{8x^2+12x}$

2. $\frac{3x^2+6x}{x^2+5x+6}$

3. $\frac{x^2-9}{2x^2+6x}$

4. $\frac{x^2-4x-21}{x^2-9x+14}$

5. $\frac{x^2-4}{3x^2-x-14}$

6. $\frac{12x^2-27}{2x^2-7x-15}$

7. $\frac{6x^3+30x^2+36x}{3x^2+27x+42}$

8. $\frac{3x^2-59}{2x^2+9x+10}$

9. $\frac{6x-3}{x^2+5x-14}$

10. $\frac{-2x^2+10x-12}{x^2-10x+16}$

Answers.

1. $\frac{3}{2x}$

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

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

10. $\frac{-2(x-3)}{x-8}$

2. $\frac{3x}{x+3}$

5. $\frac{x-2}{3x-7}$

8. $\frac{2(2x-5)}{x+2}$

3. $\frac{x-3}{2x}$

6. $\frac{3(2x-3)}{x-5}$

9. $\frac{-3x}{x+7}$