

5.21

Ratio of Quadratic Polynomials: Problem Type 1

• Example 1

Write each fraction in simplest form.

$$\begin{aligned}\frac{3x^2 - 3}{x^2 - 2x - 3} &= \frac{3(x-1)\cancel{(x+1)}}{(x-3)\cancel{(x+1)}} \\ &= \frac{3(x-1)}{x-3}\end{aligned}$$

• • • CHECK YOURSELF

Simplify.

$$\frac{a^2 - 5a + 6}{3a^2 - 6a}$$

• • • CHECK YOURSELF ANSWER

1. $\frac{a-3}{3a}$.

5.21 Exercises

Name _____

Section _____

Date _____

A N S W E R S

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Write each fraction in simplest form.

1. $\frac{4w^2 - 20w}{w^2 - 2w - 15}$

2. $\frac{m^2 - 2m - 3}{9 - m^2}$

3. $\frac{x^2 - 6x - 16}{x^2 - 64}$

4. $\frac{y^2 - 25}{y^2 - y - 20}$

5. $\frac{25 - a^2}{a^2 + a - 30}$

6. $\frac{2x^2 - 7x + 3}{9 - x^2}$