

Chapter 10

Lesson 10.1.1

10-1. It is special because any non-zero number multiplied by 1 remains the same.

10-2. Yes

d. Answers vary; sample solution: $\frac{x}{x} \cdot \frac{x+5}{x+5}$ and $\frac{n^2}{n}$

e. Yes, because 1. The fact that any number multiplied by 1 remains the same is the Identity Property of Multiplication.

10-3.

a. 1, $x \neq 0$

b. $\frac{x}{x}$, $x \neq 0$

e. hk , $h \neq 0$

f. $\frac{2m-5}{3m+1}$, $x \neq -6$ or $-\frac{1}{3}$

g. $2(n-2)$, $x \neq 2$

h. $\frac{1}{4x-1}$, $x \neq \frac{1}{4}$ or $\frac{3}{2}$

10-4.

a. Yes; you can tell by subtracting any number (other than zero).

b. No; you can tell by dividing any number (other than 1).

c. They can be simplified into like terms and are not factors of factors.

d. (i) is not simplified correctly; (ii) is simplified correctly.

10-5.

a. $\frac{x+3}{x-3}$

b. $\frac{2x-5}{3x+1}$

10-7.

a. 1

b. no

c. 1

10-8.

Yes because $x = 2$

b. Divide both sides by 100.

10-9.

a. $x < 0$

b. $x < 4$

10-10.

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

b. $x \neq -2$ or 3 , $\frac{x+2}{x(x-3)^2}$

10-11.

a. $\frac{3}{7}$

b. $\frac{5}{4}$

10-12.

b