

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{27x^2 + 81x}{36x}$

2)  $\frac{x + 8}{3x^2 + 24x}$

3)  $\frac{28}{28x - 16}$

4)  $\frac{12}{9b - 9}$

5)  $\frac{8b + 48}{b + 6}$

6)  $\frac{40}{12n + 40}$

7)  $\frac{60x^2}{70x - 30}$

8)  $\frac{x^2 + 3x - 4}{x - 1}$

9)  $\frac{28n - 28}{32}$

10)  $\frac{r - 5}{r^2 + 4r - 45}$

11)  $\frac{25v^2 - 40v}{20v^3}$

12)  $\frac{x^2 - 2x - 63}{x + 7}$

13)  $\frac{a + 9}{10a^2 + 90a}$

14)  $\frac{8 - p}{3p - 24}$

15)  $\frac{5m - 10}{m - 2}$

16)  $\frac{7n^2 - 7n}{1 - n}$

17)  $\frac{n + 5}{n^2 + 14n + 45}$

18)  $\frac{n - 10}{5n^2 - 50n}$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

$$1) \frac{27x^2 + 81x}{36x}$$

$$\frac{3(x+3)}{4}; \{0\}$$

$$2) \frac{x+8}{3x^2+24x}$$

$$\frac{1}{3x}; \{0, -8\}$$

$$3) \frac{28}{28x-16}$$

$$\frac{7}{7x-4}; \{\frac{4}{7}\}$$

$$4) \frac{12}{9b-9}$$

$$\frac{4}{3(b-1)}; \{1\}$$

$$5) \frac{8b+48}{b+6}$$

$$8; \{-6\}$$

$$6) \frac{40}{12n+40}$$

$$\frac{10}{3n+10}; \{-\frac{10}{3}\}$$

$$7) \frac{60x^2}{70x-30}$$

$$\frac{6x^2}{7x-3}; \{\frac{3}{7}\}$$

$$8) \frac{x^2+3x-4}{x-1}$$

$$x+4; \{1\}$$

$$9) \frac{28n-28}{32}$$

$$\frac{7(n-1)}{8}; \text{No excluded values.}$$

$$10) \frac{r-5}{r^2+4r-45}$$

$$\frac{1}{r+9}; \{-9, 5\}$$

$$11) \frac{25v^2-40v}{20v^3}$$

$$\frac{5v-8}{4v^2}; \{0\}$$

$$12) \frac{x^2-2x-63}{x+7}$$

$$x-9; \{-7\}$$

$$13) \frac{a+9}{10a^2+90a}$$

$$\frac{1}{10a}; \{0, -9\}$$

$$14) \frac{8-p}{3p-24}$$

$$-\frac{1}{3}; \{8\}$$

$$15) \frac{5m-10}{m-2}$$

$$5; \{2\}$$

$$16) \frac{7n^2-7n}{1-n}$$

$$-7n; \{1\}$$

$$17) \frac{n+5}{n^2+14n+45}$$

$$\frac{1}{n+9}; \{-5, -9\}$$

$$18) \frac{n-10}{5n^2-50n}$$

$$\frac{1}{5n}; \{0, 10\}$$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{a-5}{a^2-4a-5}$

2)  $\frac{70}{49p-28}$

3)  $\frac{50k-90}{100}$

4)  $\frac{x+2}{x^2+8x+12}$

5)  $\frac{b+10}{b^2+4b-60}$

6)  $\frac{12}{15x-27}$

7)  $\frac{49p}{49p-7}$

8)  $\frac{45x+9}{54}$

9)  $\frac{b^2-13b+30}{b-10}$

10)  $\frac{30}{25k-35}$

11)  $\frac{16n^2-32n}{40n}$

12)  $\frac{60}{20x-40}$

13)  $\frac{v-1}{v^2+6v-7}$

14)  $\frac{k-4}{k^2-k-12}$

15)  $\frac{45p^2-36p}{90p^2}$

16)  $\frac{10x^2+15x}{20x}$

17)  $\frac{18a^2+63a}{27a}$

18)  $\frac{8x-12}{40}$

## Assignment

Simplify each and state the excluded values.

1)  $\frac{a-5}{a^2-4a-5}$

$\frac{1}{a+1}; \{-1, 5\}$

2)  $\frac{70}{49p-28}$

$\frac{10}{7p-4}; \{\frac{4}{7}\}$

3)  $\frac{50k-90}{100}$

$\frac{5k-9}{10}; \text{No excluded values.}$

4)  $\frac{x+2}{x^2+8x+12}$

$\frac{1}{x+6}; \{-2, -6\}$

5)  $\frac{b+10}{b^2+4b-60}$

$\frac{1}{b-6}; \{-10, 6\}$

6)  $\frac{12}{15x-27}$

$\frac{4}{5x-9}; \{\frac{9}{5}\}$

7)  $\frac{49p}{49p-7}$

$\frac{7p}{7p-1}; \{\frac{1}{7}\}$

8)  $\frac{45x+9}{54}$

$\frac{5x+1}{6}; \text{No excluded values.}$

9)  $\frac{b^2-13b+30}{b-10}$

$b-3; \{10\}$

10)  $\frac{30}{25k-35}$

$\frac{6}{5k-7}; \{\frac{7}{5}\}$

11)  $\frac{16n^2-32n}{40n}$

$\frac{2(n-2)}{5}; \{0\}$

12)  $\frac{60}{20x-40}$

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

13)  $\frac{v-1}{v^2+6v-7}$

$\frac{1}{v+7}; \{-7, 1\}$

14)  $\frac{k-4}{k^2-k-12}$

$\frac{1}{k+3}; \{-3, 4\}$

15)  $\frac{45p^2-36p}{90p^2}$

$\frac{5p-4}{10p}; \{0\}$

16)  $\frac{10x^2+15x}{20x}$

$\frac{2x+3}{4}; \{0\}$

17)  $\frac{18a^2+63a}{27a}$

$\frac{2a+7}{3}; \{0\}$

18)  $\frac{8x-12}{40}$

$\frac{2x-3}{10}; \text{No excluded values.}$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{7x + 35}{x + 5}$

2)  $\frac{6k^2 - 6k}{12k^2}$

3)  $\frac{10x^2 - 10x}{x - 1}$

4)  $\frac{49v - 49}{35}$

5)  $\frac{b^2 + 6b - 40}{b + 10}$

6)  $\frac{28n^2 - 12n}{40n}$

7)  $\frac{40}{40a - 64}$

8)  $\frac{9 - n}{n^2 - 4n - 45}$

9)  $\frac{28}{21x + 7}$

10)  $\frac{30x^2 - 42x}{48x^2}$

11)  $\frac{v^2 + 9v + 20}{v + 5}$

12)  $\frac{35x - 45}{40}$

13)  $\frac{90m}{70m^2 - 80m}$

14)  $\frac{m + 6}{m^2 - 2m - 48}$

15)  $\frac{n^2 + 12n + 27}{n + 3}$

16)  $\frac{x^2 - 8x + 7}{x - 7}$

17)  $\frac{15n + 6}{21}$

18)  $\frac{70k + 60}{60}$

## Assignment

Simplify each and state the excluded values.

1)  $\frac{7x + 35}{x + 5}$

 $7; \{-5\}$ 

2)  $\frac{6k^2 - 6k}{12k^2}$

 $\frac{k-1}{2k}; \{0\}$ 

3)  $\frac{10x^2 - 10x}{x - 1}$

 $10x; \{1\}$ 

4)  $\frac{49v - 49}{35}$

 $\frac{7(v-1)}{5}; \text{No excluded values.}$ 

5)  $\frac{b^2 + 6b - 40}{b + 10}$

 $b - 4; \{-10\}$ 

6)  $\frac{28n^2 - 12n}{40n}$

 $\frac{7n-3}{10}; \{0\}$ 

7)  $\frac{40}{40a - 64}$

 $\frac{5}{5a-8}; \{\frac{8}{5}\}$ 

8)  $\frac{9 - n}{n^2 - 4n - 45}$

 $-\frac{1}{n+5}; \{-5, 9\}$ 

9)  $\frac{28}{21x + 7}$

 $\frac{4}{3x+1}; \{-\frac{1}{3}\}$ 

10)  $\frac{30x^2 - 42x}{48x^2}$

 $\frac{5x-7}{8x}; \{0\}$ 

11)  $\frac{v^2 + 9v + 20}{v + 5}$

 $v + 4; \{-5\}$ 

12)  $\frac{35x - 45}{40}$

 $\frac{7x-9}{8}; \text{No excluded values.}$ 

13)  $\frac{90m}{70m^2 - 80m}$

 $\frac{9}{7m-8}; \{0, \frac{8}{7}\}$ 

14)  $\frac{m + 6}{m^2 - 2m - 48}$

 $\frac{1}{m-8}; \{-6, 8\}$ 

15)  $\frac{n^2 + 12n + 27}{n + 3}$

 $n + 9; \{-3\}$ 

16)  $\frac{x^2 - 8x + 7}{x - 7}$

 $x - 1; \{7\}$ 

17)  $\frac{15n + 6}{21}$

 $\frac{5n+2}{7}; \text{No excluded values.}$ 

18)  $\frac{70k + 60}{60}$

 $\frac{7k+6}{6}; \text{No excluded values.}$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{m+7}{m^2-3m-70}$

2)  $\frac{r-6}{6r^2-36r}$

3)  $\frac{3n^2-9n}{n-3}$

4)  $\frac{28}{20k-32}$

5)  $\frac{b-4}{3b-12}$

6)  $\frac{20p^2}{28p^2-8p}$

7)  $\frac{k+8}{k^2+3k-40}$

8)  $\frac{30k+24}{12k}$

9)  $\frac{32m}{24m^2+16m}$

10)  $\frac{2b+10}{b+5}$

11)  $\frac{16n}{20n^2+16n}$

12)  $\frac{15v-10}{15}$

13)  $\frac{x^2+9x+20}{x+5}$

14)  $\frac{x^2+4x-60}{6-x}$

15)  $\frac{60x}{50x^2+10x}$

16)  $\frac{18a^3}{63a^2+54a}$

17)  $\frac{18n}{42n+30}$

18)  $\frac{x+6}{3x^2+18x}$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

Simplify each and state the excluded values.

$$1) \frac{m+7}{m^2-3m-70}$$

$$\frac{1}{m-10}; \{-7, 10\}$$

$$2) \frac{r-6}{6r^2-36r}$$

$$\frac{1}{6r}; \{0, 6\}$$

$$3) \frac{3n^2-9n}{n-3}$$

$$3n; \{3\}$$

$$4) \frac{28}{20k-32}$$

$$\frac{7}{5k-8}; \{\frac{8}{5}\}$$

$$5) \frac{b-4}{3b-12}$$

$$\frac{1}{3}; \{4\}$$

$$6) \frac{20p^2}{28p^2-8p}$$

$$\frac{5p}{7p-2}; \{0, \frac{2}{7}\}$$

$$7) \frac{k+8}{k^2+3k-40}$$

$$\frac{1}{k-5}; \{-8, 5\}$$

$$8) \frac{30k+24}{12k}$$

$$\frac{5k+4}{2k}; \{0\}$$

$$9) \frac{32m}{24m^2+16m}$$

$$\frac{4}{3m+2}; \{0, -\frac{2}{3}\}$$

$$10) \frac{2b+10}{b+5}$$

$$2; \{-5\}$$

$$11) \frac{16n}{20n^2+16n}$$

$$\frac{4}{5n+4}; \{0, -\frac{4}{5}\}$$

$$12) \frac{15v-10}{15}$$

$$\frac{3v-2}{3}; \text{No excluded values.}$$

$$13) \frac{x^2+9x+20}{x+5}$$

$$x+4; \{-5\}$$

$$14) \frac{x^2+4x-60}{6-x}$$

$$(x+10) \cdot -1; \{6\}$$

$$15) \frac{60x}{50x^2+10x}$$

$$\frac{6}{5x+1}; \{0, -\frac{1}{5}\}$$

$$16) \frac{18a^3}{63a^2+54a}$$

$$\frac{2a^2}{7a+6}; \{0, -\frac{6}{7}\}$$

$$17) \frac{18n}{42n+30}$$

$$\frac{3n}{7n+5}; \{-\frac{5}{7}\}$$

$$18) \frac{x+6}{3x^2+18x}$$

$$\frac{1}{3x}; \{0, -6\}$$



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{56a + 48}{40a}$

2)  $\frac{18}{6k - 14}$

3)  $\frac{p + 7}{p^2 + 4p - 21}$

4)  $\frac{20n + 24}{20n^2}$

5)  $\frac{7n^2 - 14n}{2 - n}$

6)  $\frac{r^2 - 49}{r + 7}$

7)  $\frac{x - 2}{x^2 + 4x - 12}$

8)  $\frac{b^2 - 10b + 24}{b - 4}$

9)  $\frac{48n^2}{42n + 30}$

10)  $\frac{x + 3}{5x + 15}$

11)  $\frac{2r + 18}{r + 9}$

12)  $\frac{x^2 + 2x + 1}{x + 1}$

13)  $\frac{p - 3}{p^2 - 11p + 24}$

14)  $\frac{9b + 54}{b + 6}$

15)  $\frac{36}{18k - 81}$

16)  $\frac{90p}{20p + 60}$

17)  $\frac{x^2 - 36}{x + 6}$

18)  $\frac{a^2 - 8a + 7}{a - 7}$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

$$1) \frac{56a + 48}{40a}$$

$$\frac{7a + 6}{5a}; \{0\}$$

$$2) \frac{18}{6k - 14}$$

$$\frac{9}{3k - 7}; \left\{\frac{7}{3}\right\}$$

$$3) \frac{p + 7}{p^2 + 4p - 21}$$

$$\frac{1}{p - 3}; \{-7, 3\}$$

$$4) \frac{20n + 24}{20n^2}$$

$$\frac{5n + 6}{5n^2}; \{0\}$$

$$5) \frac{7n^2 - 14n}{2 - n}$$

$$-7n; \{2\}$$

$$6) \frac{r^2 - 49}{r + 7}$$

$$r - 7; \{-7\}$$

$$7) \frac{x - 2}{x^2 + 4x - 12}$$

$$\frac{1}{x + 6}; \{-6, 2\}$$

$$8) \frac{b^2 - 10b + 24}{b - 4}$$

$$b - 6; \{4\}$$

$$9) \frac{48n^2}{42n + 30}$$

$$\frac{8n^2}{7n + 5}; \left\{-\frac{5}{7}\right\}$$

$$10) \frac{x + 3}{5x + 15}$$

$$\frac{1}{5}; \{-3\}$$

$$11) \frac{2r + 18}{r + 9}$$

$$2; \{-9\}$$

$$12) \frac{x^2 + 2x + 1}{x + 1}$$

$$x + 1; \{-1\}$$

$$13) \frac{p - 3}{p^2 - 11p + 24}$$

$$\frac{1}{p - 8}; \{3, 8\}$$

$$14) \frac{9b + 54}{b + 6}$$

$$9; \{-6\}$$

$$15) \frac{36}{18k - 81}$$

$$\frac{4}{2k - 9}; \left\{\frac{9}{2}\right\}$$

$$16) \frac{90p}{20p + 60}$$

$$\frac{9p}{2(p + 3)}; \{-3\}$$

$$17) \frac{x^2 - 36}{x + 6}$$

$$x - 6; \{-6\}$$

$$18) \frac{a^2 - 8a + 7}{a - 7}$$

$$a - 1; \{7\}$$

## Assignment

Simplify each and state the excluded values.

1)  $\frac{10r - 30}{35}$

2)  $\frac{8x - 48}{x - 6}$

3)  $\frac{9}{21x - 9}$

4)  $\frac{m + 1}{m^2 - 7m - 8}$

5)  $\frac{k^2 - 4k + 4}{2 - k}$

6)  $\frac{3x - 27}{x - 9}$

7)  $\frac{v^2 + 3v - 40}{v - 5}$

8)  $\frac{6x^2 - 3x}{24x}$

9)  $\frac{72b}{16b^2 - 24b}$

10)  $\frac{12p - 60}{24p}$

11)  $\frac{x + 7}{x^2 + 15x + 56}$

12)  $\frac{5x - 45}{9 - x}$

13)  $\frac{x - 2}{10x - 20}$

14)  $\frac{24r + 16}{56r}$

15)  $\frac{70m}{50m + 100}$

16)  $\frac{12}{42x - 6}$

17)  $\frac{b^2 - 10b + 16}{b - 8}$

18)  $\frac{35n + 30}{15}$

## Assignment

Simplify each and state the excluded values.

1)  $\frac{10r - 30}{35}$

$$\frac{2(r - 3)}{7}; \text{ No excluded values.}$$

2)  $\frac{8x - 48}{x - 6}$

$$8; \{6\}$$

3)  $\frac{9}{21x - 9}$

$$\frac{3}{7x - 3}; \left\{\frac{3}{7}\right\}$$

4)  $\frac{m + 1}{m^2 - 7m - 8}$

$$\frac{1}{m - 8}; \{-1, 8\}$$

5)  $\frac{k^2 - 4k + 4}{2 - k}$

$$-(k - 2); \{2\}$$

6)  $\frac{3x - 27}{x - 9}$

$$3; \{9\}$$

7)  $\frac{v^2 + 3v - 40}{v - 5}$

$$v + 8; \{5\}$$

8)  $\frac{6x^2 - 3x}{24x}$

$$\frac{2x - 1}{8}; \{0\}$$

9)  $\frac{72b}{16b^2 - 24b}$

$$\frac{9}{2b - 3}; \left\{0, \frac{3}{2}\right\}$$

10)  $\frac{12p - 60}{24p}$

$$\frac{p - 5}{2p}; \{0\}$$

11)  $\frac{x + 7}{x^2 + 15x + 56}$

$$\frac{1}{x + 8}; \{-7, -8\}$$

12)  $\frac{5x - 45}{9 - x}$

$$-5; \{9\}$$

13)  $\frac{x - 2}{10x - 20}$

$$\frac{1}{10}; \{2\}$$

14)  $\frac{24r + 16}{56r}$

$$\frac{3r + 2}{7r}; \{0\}$$

15)  $\frac{70m}{50m + 100}$

$$\frac{7m}{5(m + 2)}; \{-2\}$$

16)  $\frac{12}{42x - 6}$

$$\frac{2}{7x - 1}; \left\{\frac{1}{7}\right\}$$

17)  $\frac{b^2 - 10b + 16}{b - 8}$

$$b - 2; \{8\}$$

18)  $\frac{35n + 30}{15}$

$$\frac{7n + 6}{3}; \text{ No excluded values.}$$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{12p^2 + 24p}{60p}$

2)  $\frac{6p^2 - 6p}{p - 1}$

3)  $\frac{r + 8}{4r + 32}$

4)  $\frac{9x}{6x^2 + 30x}$

5)  $\frac{12p^2 - 40p}{24p^3}$

6)  $\frac{a - 8}{a^2 - 11a + 24}$

7)  $\frac{n + 1}{3n + 3}$

8)  $\frac{56x^2 + 32x}{64x}$

9)  $\frac{k - 7}{k^2 - 3k - 28}$

10)  $\frac{28x}{14x - 49}$

11)  $\frac{24n + 72}{48}$

12)  $\frac{70x^2 - 40x}{60x}$

13)  $\frac{45}{18b - 27}$

14)  $\frac{2p + 8}{p + 4}$

15)  $\frac{32b}{24b^2 + 56b}$

16)  $\frac{30}{42n - 6}$

17)  $\frac{63k}{18k^2 + 27k}$

18)  $\frac{3v^2 + 27v}{v + 9}$

## Assignment

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

$$1) \frac{12p^2 + 24p}{60p}$$

$$\frac{p+2}{5}; \{0\}$$

$$2) \frac{6p^2 - 6p}{p-1}$$

$$6p; \{1\}$$

$$3) \frac{r+8}{4r+32}$$

$$\frac{1}{4}; \{-8\}$$

$$4) \frac{9x}{6x^2 + 30x}$$

$$\frac{3}{2(x+5)}; \{0, -5\}$$

$$5) \frac{12p^2 - 40p}{24p^3}$$

$$\frac{3p-10}{6p^2}; \{0\}$$

$$6) \frac{a-8}{a^2 - 11a + 24}$$

$$\frac{1}{a-3}; \{3, 8\}$$

$$7) \frac{n+1}{3n+3}$$

$$\frac{1}{3}; \{-1\}$$

$$8) \frac{56x^2 + 32x}{64x}$$

$$\frac{7x+4}{8}; \{0\}$$

$$9) \frac{k-7}{k^2 - 3k - 28}$$

$$\frac{1}{k+4}; \{-4, 7\}$$

$$10) \frac{28x}{14x - 49}$$

$$\frac{4x}{2x-7}; \{\frac{7}{2}\}$$

$$11) \frac{24n+72}{48}$$

$$\frac{n+3}{2}; \text{No excluded values.}$$

$$12) \frac{70x^2 - 40x}{60x}$$

$$\frac{7x-4}{6}; \{0\}$$

$$13) \frac{45}{18b-27}$$

$$\frac{5}{2b-3}; \{\frac{3}{2}\}$$

$$14) \frac{2p+8}{p+4}$$

$$2; \{-4\}$$

$$15) \frac{32b}{24b^2 + 56b}$$

$$\frac{4}{3b+7}; \{0, -\frac{7}{3}\}$$

$$16) \frac{30}{42n-6}$$

$$\frac{5}{7n-1}; \{\frac{1}{7}\}$$

$$17) \frac{63k}{18k^2 + 27k}$$

$$\frac{7}{2k+3}; \{0, -\frac{3}{2}\}$$

$$18) \frac{3v^2 + 27v}{v+9}$$

$$3v; \{-9\}$$

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{63r}{49r - 63}$

2)  $\frac{n - 4}{n^2 + n - 20}$

3)  $\frac{28m^2 + 4m}{36m}$

4)  $\frac{v^2 + 2v - 15}{v + 5}$

5)  $\frac{n - 3}{n^2 - n - 6}$

6)  $\frac{10r - 50}{r - 5}$

7)  $\frac{36}{8x - 12}$

8)  $\frac{24x - 32}{24x}$

9)  $\frac{81n^2}{63n + 9}$

10)  $\frac{r + 4}{8r + 32}$

11)  $\frac{40n^2 - 16n}{16n^3}$

12)  $\frac{42n^2 - 54n}{42n}$

13)  $\frac{42}{14x + 21}$

14)  $\frac{5p + 35}{p + 7}$

15)  $\frac{a - 3}{a^2 + 7a - 30}$

16)  $\frac{25k + 25}{20k^2}$

17)  $\frac{12n^2 - 12n}{16n}$

18)  $\frac{20x + 70}{90}$

## Assignment

Simplify each and state the excluded values.

1)  $\frac{63r}{49r - 63}$

$$\frac{9r}{7r - 9}; \left\{\frac{9}{7}\right\}$$

3)  $\frac{28m^2 + 4m}{36m}$

$$\frac{7m + 1}{9}; \{0\}$$

5)  $\frac{n - 3}{n^2 - n - 6}$

$$\frac{1}{n + 2}; \{-2, 3\}$$

7)  $\frac{36}{8x - 12}$

$$\frac{9}{2x - 3}; \left\{\frac{3}{2}\right\}$$

9)  $\frac{81n^2}{63n + 9}$

$$\frac{9n^2}{7n + 1}; \left\{-\frac{1}{7}\right\}$$

11)  $\frac{40n^2 - 16n}{16n^3}$

$$\frac{5n - 2}{2n^2}; \{0\}$$

13)  $\frac{42}{14x + 21}$

$$\frac{6}{2x + 3}; \left\{-\frac{3}{2}\right\}$$

15)  $\frac{a - 3}{a^2 + 7a - 30}$

$$\frac{1}{a + 10}; \{-10, 3\}$$

17)  $\frac{12n^2 - 12n}{16n}$

$$\frac{3(n - 1)}{4}; \{0\}$$

2)  $\frac{n - 4}{n^2 + n - 20}$

$$\frac{1}{n + 5}; \{-5, 4\}$$

4)  $\frac{v^2 + 2v - 15}{v + 5}$

$$v - 3; \{-5\}$$

6)  $\frac{10r - 50}{r - 5}$

$$10; \{5\}$$

8)  $\frac{24x - 32}{24x}$

$$\frac{3x - 4}{3x}; \{0\}$$

10)  $\frac{r + 4}{8r + 32}$

$$\frac{1}{8}; \{-4\}$$

12)  $\frac{42n^2 - 54n}{42n}$

$$\frac{7n - 9}{7}; \{0\}$$

14)  $\frac{5p + 35}{p + 7}$

$$5; \{-7\}$$

16)  $\frac{25k + 25}{20k^2}$

$$\frac{5(k + 1)}{4k^2}; \{0\}$$

18)  $\frac{20x + 70}{90}$

$$\frac{2x + 7}{9}; \text{No excluded values.}$$



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{4n - 40}{n - 10}$

2)  $\frac{8 - p}{7p - 56}$

3)  $\frac{a^2 + 17a + 72}{a + 8}$

4)  $\frac{6}{10x + 4}$

5)  $\frac{18k + 9}{54}$

6)  $\frac{30}{20a - 70}$

7)  $\frac{n - 8}{n^2 - 15n + 56}$

8)  $\frac{n^2 - 3n - 70}{n + 7}$

9)  $\frac{20}{25m + 20}$

10)  $\frac{8r + 4}{8}$

11)  $\frac{8x^2 - 16x}{2 - x}$

12)  $\frac{18a^2}{4a - 6}$

13)  $\frac{1 - n}{9n - 9}$

14)  $\frac{10n^2}{10n^2 + 45n}$

15)  $\frac{10r - 70}{r - 7}$

16)  $\frac{6p + 24}{9p^2}$

17)  $\frac{n - 4}{n^2 + 6n - 40}$

18)  $\frac{54a}{42a^2 + 42a}$

## Assignment

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

**Simplify each and state the excluded values.**

1)  $\frac{4n - 40}{n - 10}$

4; {10}

2)  $\frac{8 - p}{7p - 56}$

 $-\frac{1}{7}$ ; {8}

3)  $\frac{a^2 + 17a + 72}{a + 8}$

 $a + 9$ ; {-8}

4)  $\frac{6}{10x + 4}$

 $\frac{3}{5x + 2}$ ;  $\{-\frac{2}{5}\}$ 

5)  $\frac{18k + 9}{54}$

 $\frac{2k + 1}{6}$ ; No excluded values.

6)  $\frac{30}{20a - 70}$

 $\frac{3}{2a - 7}$ ;  $\{\frac{7}{2}\}$ 

7)  $\frac{n - 8}{n^2 - 15n + 56}$

 $\frac{1}{n - 7}$ ; {7, 8}

8)  $\frac{n^2 - 3n - 70}{n + 7}$

 $n - 10$ ; {-7}

9)  $\frac{20}{25m + 20}$

 $\frac{4}{5m + 4}$ ;  $\{-\frac{4}{5}\}$ 

10)  $\frac{8r + 4}{8}$

 $\frac{2r + 1}{2}$ ; No excluded values.

11)  $\frac{8x^2 - 16x}{2 - x}$

 $-8x$ ; {2}

12)  $\frac{18a^2}{4a - 6}$

 $\frac{9a^2}{2a - 3}$ ;  $\{\frac{3}{2}\}$ 

13)  $\frac{1 - n}{9n - 9}$

 $-\frac{1}{9}$ ; {1}

14)  $\frac{10n^2}{10n^2 + 45n}$

 $\frac{2n}{2n + 9}$ ;  $\{0, -\frac{9}{2}\}$ 

15)  $\frac{10r - 70}{r - 7}$

10; {7}

16)  $\frac{6p + 24}{9p^2}$

 $\frac{2(p + 4)}{3p^2}$ ; {0}

17)  $\frac{n - 4}{n^2 + 6n - 40}$

 $\frac{1}{n + 10}$ ; {-10, 4}

18)  $\frac{54a}{42a^2 + 42a}$

 $\frac{9}{7(a + 1)}$ ; {0, -1}

## Assignment

**Simplify each and state the excluded values.**

1)  $\frac{24n - 48}{48}$

2)  $\frac{20x}{28x^2 - 20x}$

3)  $\frac{b^2 - 4b - 12}{b + 2}$

4)  $\frac{4n^2 - 20n}{n - 5}$

5)  $\frac{30b - 60}{30}$

6)  $\frac{40m}{50m^2 + 100m}$

7)  $\frac{x + 7}{7x + 49}$

8)  $\frac{v - 2}{v^2 + 4v - 12}$

9)  $\frac{30x - 42}{30}$

10)  $\frac{k^2 - 36}{6 - k}$

11)  $\frac{8k^2}{12k^2 + 4k}$

12)  $\frac{p^2 + 11p + 10}{p + 1}$

13)  $\frac{x - 8}{7x - 56}$

14)  $\frac{12n + 36}{12}$

15)  $\frac{m + 4}{5m^2 + 20m}$

16)  $\frac{x - 7}{8x - 56}$

17)  $\frac{48}{42x + 60}$

18)  $\frac{9x - 9}{x - 1}$

## Assignment

Simplify each and state the excluded values.

1)  $\frac{24n - 48}{48}$

$\frac{n - 2}{2}$ ; No excluded values.

2)  $\frac{20x}{28x^2 - 20x}$

$\frac{5}{7x - 5}$ ;  $\{0, \frac{5}{7}\}$

3)  $\frac{b^2 - 4b - 12}{b + 2}$

$b - 6$ ;  $\{-2\}$

4)  $\frac{4n^2 - 20n}{n - 5}$

$4n$ ;  $\{5\}$

5)  $\frac{30b - 60}{30}$

$b - 2$ ; No excluded values.

6)  $\frac{40m}{50m^2 + 100m}$

$\frac{4}{5(m + 2)}$ ;  $\{0, -2\}$

7)  $\frac{x + 7}{7x + 49}$

$\frac{1}{7}$ ;  $\{-7\}$

8)  $\frac{v - 2}{v^2 + 4v - 12}$

$\frac{1}{v + 6}$ ;  $\{-6, 2\}$

9)  $\frac{30x - 42}{30}$

$\frac{5x - 7}{5}$ ; No excluded values.

10)  $\frac{k^2 - 36}{6 - k}$

$(k + 6) \cdot -1$ ;  $\{6\}$

11)  $\frac{8k^2}{12k^2 + 4k}$

$\frac{2k}{3k + 1}$ ;  $\{0, -\frac{1}{3}\}$

12)  $\frac{p^2 + 11p + 10}{p + 1}$

$p + 10$ ;  $\{-1\}$

13)  $\frac{x - 8}{7x - 56}$

$\frac{1}{7}$ ;  $\{8\}$

14)  $\frac{12n + 36}{12}$

$n + 3$ ; No excluded values.

15)  $\frac{m + 4}{5m^2 + 20m}$

$\frac{1}{5m}$ ;  $\{0, -4\}$

16)  $\frac{x - 7}{8x - 56}$

$\frac{1}{8}$ ;  $\{7\}$

17)  $\frac{48}{42x + 60}$

$\frac{8}{7x + 10}$ ;  $\{-\frac{10}{7}\}$

18)  $\frac{9x - 9}{x - 1}$

$9$ ;  $\{1\}$