

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{v-2}{v-3} - \frac{3v}{v-1}$

2) $\frac{6}{4} + \frac{b-2}{3b-5}$

3) $\frac{b+1}{2b^2-6b} + \frac{2}{3}$

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

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

6) $\frac{4k}{2} + \frac{k+3}{3k+15}$

7) $\frac{3n}{n-4} - \frac{3n}{n+5}$

8) $\frac{x-1}{20x-20} + 5$

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

10) $\frac{5}{3x-1} + \frac{6x}{2x+3}$

11) $\frac{5x}{6} - \frac{6}{x-1}$

12) $\frac{6}{2} - \frac{2x-6}{15x^2+18x}$

13) $\frac{n+1}{n+2} + \frac{6n}{5}$

14) $\frac{4x}{x-3} + \frac{5x}{x-5}$

15) $\frac{2}{3} - \frac{4p}{p+5}$

16) $\frac{3}{x+5} + \frac{2x}{x+3}$

17) $\frac{2x}{x+1} + \frac{5}{x+3}$

18) $\frac{3}{n+4} - \frac{6}{2n-1}$

Assignment

Date _____ Period _____

Simplify each expression.

$$1) \frac{v-2}{v-3} - \frac{3v}{v-1}$$

$$\frac{-2v^2 + 6v + 2}{(v-1)(v-3)}$$

$$2) \frac{6}{4} + \frac{b-2}{3b-5}$$

$$\frac{11b-19}{2(3b-5)}$$

$$3) \frac{b+1}{2b^2-6b} + \frac{2}{3}$$

$$\frac{-9b+3+4b^2}{6b(b-3)}$$

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

$$\frac{6x^2+32x-8}{(x+2)(x+6)}$$

$$5) \frac{2}{b+2} - \frac{3b}{b-4}$$

$$\frac{-4b-8-3b^2}{(b+2)(b-4)}$$

$$6) \frac{4k}{2} + \frac{k+3}{3k+15}$$

$$\frac{6k^2+31k+3}{3(k+5)}$$

$$7) \frac{3n}{n-4} - \frac{3n}{n+5}$$

$$\frac{27n}{(n+5)(n-4)}$$

$$8) \frac{x-1}{20x-20} + 5$$

$$\frac{101}{20}$$

$$9) \frac{5}{n-3} - \frac{2n}{n-6}$$

$$\frac{11n-30-2n^2}{(n-3)(n-6)}$$

$$10) \frac{5}{3x-1} + \frac{6x}{2x+3}$$

$$\frac{4x+15+18x^2}{(3x-1)(2x+3)}$$

$$11) \frac{5x}{6} - \frac{6}{x-1}$$

$$\frac{5x^2-5x-36}{6(x-1)}$$

$$12) \frac{6}{2} - \frac{2x-6}{15x^2+18x}$$

$$\frac{45x^2+52x+6}{3x(5x+6)}$$

$$13) \frac{n+1}{n+2} + \frac{6n}{5}$$

$$\frac{5+17n+6n^2}{5(n+2)}$$

$$14) \frac{4x}{x-3} + \frac{5x}{x-5}$$

$$\frac{9x^2-35x}{(x-3)(x-5)}$$

$$15) \frac{2}{3} - \frac{4p}{p+5}$$

$$\frac{-10p+10}{3(p+5)}$$

$$16) \frac{3}{x+5} + \frac{2x}{x+3}$$

$$\frac{13x+9+2x^2}{(x+3)(x+5)}$$

$$17) \frac{2x}{x+1} + \frac{5}{x+3}$$

$$\frac{2x^2+11x+5}{(x+1)(x+3)}$$

$$18) \frac{3}{n+4} - \frac{6}{2n-1}$$

$$-\frac{27}{(2n-1)(n+4)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{5a}{2a-2} - \frac{3a}{4}$

2) $\frac{6n}{n+6} - \frac{2}{n+1}$

3) $\frac{3}{2p+4} + \frac{4p}{6}$

4) $\frac{6}{3x+1} - \frac{4x}{2x^2}$

5) $\frac{4v}{3} - \frac{v+4}{2v-4}$

6) $\frac{2n}{4n} + \frac{n-1}{n+5}$

7) $\frac{5}{m-6} + \frac{5m}{m+6}$

8) $\frac{6x}{x+4} - \frac{2}{x-5}$

9) $\frac{k-6}{2} + \frac{6}{3k+6}$

10) $\frac{3}{5a-6} - \frac{6}{a+3}$

11) $\frac{6}{3} - \frac{3x}{2x+4}$

12) $\frac{3x}{3x-15} - (x-1)$

13) $\frac{4n}{3} - \frac{5n}{3n+3}$

14) $\frac{6a-4}{6a-12} - \frac{5}{3}$

15) $\frac{3}{3m} - \frac{5m-3}{3m-9}$

16) $\frac{3}{x-1} + \frac{2x}{x+6}$

17) $\frac{5b}{5b^2} + \frac{5b+4}{5b+3}$

18) $\frac{6v}{2v+1} + \frac{6}{2v^2}$

Assignment

Date _____ Period _____

Simplify each expression.

$$1) \frac{5a}{2a-2} - \frac{3a}{4}$$

$$\frac{13a - 3a^2}{4(a-1)}$$

$$2) \frac{6n}{n+6} - \frac{2}{n+1}$$

$$\frac{6n^2 + 4n - 12}{(n+1)(n+6)}$$

$$3) \frac{3}{2p+4} + \frac{4p}{6}$$

$$\frac{9 + 4p^2 + 8p}{6(p+2)}$$

$$4) \frac{6}{3x+1} - \frac{4x}{2x^2}$$

$$-\frac{2}{x(3x+1)}$$

$$5) \frac{4v}{3} - \frac{v+4}{2v-4}$$

$$\frac{8v^2 - 19v - 12}{6(v-2)}$$

$$6) \frac{2n}{4n} + \frac{n-1}{n+5}$$

$$\frac{3n+3}{2(n+5)}$$

$$7) \frac{5}{m-6} + \frac{5m}{m+6}$$

$$\frac{30 - 25m + 5m^2}{(m+6)(m-6)}$$

$$8) \frac{6x}{x+4} - \frac{2}{x-5}$$

$$\frac{6x^2 - 32x - 8}{(x+4)(x-5)}$$

$$9) \frac{k-6}{2} + \frac{6}{3k+6}$$

$$\frac{k^2 - 4k - 8}{2(k+2)}$$

$$10) \frac{3}{5a-6} - \frac{6}{a+3}$$

$$\frac{-27a + 45}{(5a-6)(a+3)}$$

$$11) \frac{6}{3} - \frac{3x}{2x+4}$$

$$\frac{x+8}{2(x+2)}$$

$$12) \frac{3x}{3x-15} - (x-1)$$

$$\frac{-x^2 + 7x - 5}{x-5}$$

$$13) \frac{4n}{3} - \frac{5n}{3n+3}$$

$$\frac{4n^2 - n}{3(n+1)}$$

$$14) \frac{6a-4}{6a-12} - \frac{5}{3}$$

$$\frac{-2a+8}{3(a-2)}$$

$$15) \frac{3}{3m} - \frac{5m-3}{3m-9}$$

$$\frac{6m-9-5m^2}{3m(m-3)}$$

$$16) \frac{3}{x-1} + \frac{2x}{x+6}$$

$$\frac{x+18+2x^2}{(x+6)(x-1)}$$

$$17) \frac{5b}{5b^2} + \frac{5b+4}{5b+3}$$

$$\frac{9b+3+5b^2}{b(5b+3)}$$

$$18) \frac{6v}{2v+1} + \frac{6}{2v^2}$$

$$\frac{6v^3 + 6v + 3}{v^2(2v+1)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{6}{2} - \frac{n-6}{n+4}$

2) $\frac{6}{3n} - \frac{6}{n+3}$

3) $\frac{6n}{n+5} - \frac{5n}{n-6}$

4) $2 - \frac{6}{18n^2 + 30n}$

5) $\frac{5v+4}{15v-18} + \frac{6v}{3}$

6) $\frac{4n}{3n+18} + \frac{4n}{3}$

7) $\frac{x-6}{2x-12} + \frac{x+3}{3x}$

8) $\frac{n-4}{6n^2+24n} - 2$

9) $\frac{3x}{x+5} - \frac{6x}{x+6}$

10) $\frac{6p}{5p-1} + \frac{2}{p+2}$

11) $\frac{2}{n+4} - \frac{6n}{4}$

12) $\frac{3m}{3m+4} - \frac{6}{m+3}$

13) $\frac{4r}{r-4} + \frac{2r}{3r+6}$

14) $2 + \frac{4}{5r+10}$

15) $\frac{3}{4} - \frac{n-4}{n+5}$

16) $\frac{3}{2k} + \frac{2k}{3k-18}$

17) $\frac{2}{b+6} - \frac{4b}{b+2}$

18) $3 - \frac{2x}{30x^2+12x}$

Assignment

Date _____ Period _____

Simplify each expression.

$$1) \frac{6}{2} - \frac{n-6}{n+4}$$

$$\frac{2n+18}{n+4}$$

$$2) \frac{6}{3n} - \frac{6}{n+3}$$

$$\frac{-4n+6}{n(n+3)}$$

$$3) \frac{6n}{n+5} - \frac{5n}{n-6}$$

$$\frac{n^2-61n}{(n+5)(n-6)}$$

$$4) 2 - \frac{6}{18n^2+30n}$$

$$\frac{6n^2+10n-1}{n(3n+5)}$$

$$5) \frac{5v+4}{15v-18} + \frac{6v}{3}$$

$$\frac{30v^2-31v+4}{3(5v-6)}$$

$$6) \frac{4n}{3n+18} + \frac{4n}{3}$$

$$\frac{28n+4n^2}{3(n+6)}$$

$$7) \frac{x-6}{2x-12} + \frac{x+3}{3x}$$

$$\frac{5x+6}{6x}$$

$$8) \frac{n-4}{6n^2+24n} - 2$$

$$\frac{-12n^2-47n-4}{6n(n+4)}$$

$$9) \frac{3x}{x+5} - \frac{6x}{x+6}$$

$$\frac{-3x^2-12x}{(x+5)(x+6)}$$

$$10) \frac{6p}{5p-1} + \frac{2}{p+2}$$

$$\frac{6p^2+22p-2}{(5p-1)(p+2)}$$

$$11) \frac{2}{n+4} - \frac{6n}{4}$$

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

$$12) \frac{3m}{3m+4} - \frac{6}{m+3}$$

$$\frac{3m^2-9m-24}{(3m+4)(m+3)}$$

$$13) \frac{4r}{r-4} + \frac{2r}{3r+6}$$

$$\frac{14r^2+16r}{3(r+2)(r-4)}$$

$$14) 2 + \frac{4}{5r+10}$$

$$\frac{10r+24}{5(r+2)}$$

$$15) \frac{3}{4} - \frac{n-4}{n+5}$$

$$\frac{-n+31}{4(n+5)}$$

$$16) \frac{3}{2k} + \frac{2k}{3k-18}$$

$$\frac{9k-54+4k^2}{6k(k-6)}$$

$$17) \frac{2}{b+6} - \frac{4b}{b+2}$$

$$\frac{-22b+4-4b^2}{(b+2)(b+6)}$$

$$18) 3 - \frac{2x}{30x^2+12x}$$

$$\frac{45x+17}{3(5x+2)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{5}{6} + \frac{x-3}{x+6}$

2) $\frac{4}{2x-4} - \frac{4}{x-5}$

3) $\frac{4x}{x-1} - \frac{6x}{x+3}$

4) $\frac{2x}{9x-12} - \frac{2x}{3x}$

5) $\frac{5}{6r} + \frac{r-2}{5r-6}$

6) $\frac{3a-3}{5} - \frac{5a}{a+6}$

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

8) $\frac{5}{5r-2} - \frac{2r}{2r^2}$

9) $\frac{6}{v+1} - \frac{4}{v-3}$

10) $\frac{4}{n+5} - \frac{5}{2n-1}$

11) $\frac{6}{5n+6} + \frac{2}{3n+6}$

12) $3r - \frac{3r}{25r^2 - 20r}$

13) $\frac{4}{b+6} + \frac{b+2}{b-3}$

14) $\frac{4}{x-2} - \frac{5}{5x}$

15) $\frac{5}{2x+1} - \frac{4x}{x-4}$

16) $\frac{3a}{a-1} - \frac{2}{5a+6}$

17) $2b - \frac{b+1}{b^2+9b+20}$

18) $\frac{2a}{a-3} - \frac{3a}{5a}$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{5}{6} + \frac{x-3}{x+6}$

$$\frac{11x+12}{6(x+6)}$$

2) $\frac{4}{2x-4} - \frac{4}{x-5}$

$$\frac{-2x-2}{(x-2)(x-5)}$$

3) $\frac{4x}{x-1} - \frac{6x}{x+3}$

$$\frac{-2x^2+18x}{(x+3)(x-1)}$$

4) $\frac{2x}{9x-12} - \frac{2x}{3x}$

$$\frac{-4x+8}{3(3x-4)}$$

5) $\frac{5}{6r} + \frac{r-2}{5r-6}$

$$\frac{13r-30+6r^2}{6r(5r-6)}$$

6) $\frac{3a-3}{5} - \frac{5a}{a+6}$

$$\frac{3a^2-10a-18}{5(a+6)}$$

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

$$\frac{-5v+19}{2(v-3)}$$

8) $\frac{5}{5r-2} - \frac{2r}{2r^2}$

$$\frac{2}{r(5r-2)}$$

9) $\frac{6}{v+1} - \frac{4}{v-3}$

$$\frac{2v-22}{(v+1)(v-3)}$$

10) $\frac{4}{n+5} - \frac{5}{2n-1}$

$$\frac{3n-29}{(2n-1)(n+5)}$$

11) $\frac{6}{5n+6} + \frac{2}{3n+6}$

$$\frac{28n+48}{3(5n+6)(n+2)}$$

12) $3r - \frac{3r}{25r^2-20r}$

$$\frac{75r^2-60r-3}{5(5r-4)}$$

13) $\frac{4}{b+6} + \frac{b+2}{b-3}$

$$\frac{12b+b^2}{(b+6)(b-3)}$$

14) $\frac{4}{x-2} - \frac{5}{5x}$

$$\frac{3x+2}{x(x-2)}$$

15) $\frac{5}{2x+1} - \frac{4x}{x-4}$

$$\frac{x-20-8x^2}{(2x+1)(x-4)}$$

16) $\frac{3a}{a-1} - \frac{2}{5a+6}$

$$\frac{15a^2+16a+2}{(5a+6)(a-1)}$$

17) $2b - \frac{b+1}{b^2+9b+20}$

$$\frac{2b^3+18b^2+39b-1}{(b+4)(b+5)}$$

18) $\frac{2a}{a-3} - \frac{3a}{5a}$

$$\frac{7a+9}{5(a-3)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{6}{v^2 + 7v + 10} + 2v$

2) $\frac{6}{2r} - \frac{r-5}{3r+3}$

3) $\frac{p-1}{3p-4} - \frac{5}{p+6}$

4) $\frac{5v}{2v-1} - \frac{4}{v+4}$

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

6) $\frac{4}{x+2} - \frac{6}{x-5}$

7) $\frac{2}{5x-6} - \frac{5}{x-2}$

8) $\frac{r+6}{r-4} - \frac{6r}{6}$

9) $\frac{5}{m+4} + \frac{6}{m+3}$

10) $\frac{4}{6} + \frac{2}{b-1}$

11) $\frac{n+4}{2n+4} + \frac{5n}{2n}$

12) $\frac{5}{3} - \frac{3b}{2b-1}$

13) $\frac{4a}{6a^2 - 24a} + 5$

14) $\frac{6}{x-2} - \frac{5x}{2x^2}$

15) $\frac{3}{4v} - \frac{4}{v+6}$

16) $\frac{5}{3m^2 + 6m} - \frac{3m}{2}$

17) $\frac{5}{5n-5} - \frac{6}{n-2}$

18) $\frac{6}{n-2} - \frac{6}{n+2}$

Assignment

Date _____ Period _____

Simplify each expression.

$$1) \frac{6}{v^2 + 7v + 10} + 2v$$

$$\frac{2v^3 + 14v^2 + 20v + 6}{(v + 2)(v + 5)}$$

$$2) \frac{6}{2r} - \frac{r - 5}{3r + 3}$$

$$\frac{14r + 9 - r^2}{3r(r + 1)}$$

$$3) \frac{p - 1}{3p - 4} - \frac{5}{p + 6}$$

$$\frac{p^2 - 10p + 14}{(3p - 4)(p + 6)}$$

$$4) \frac{5v}{2v - 1} - \frac{4}{v + 4}$$

$$\frac{5v^2 + 12v + 4}{(2v - 1)(v + 4)}$$

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

$$\frac{12n - 4}{5(n - 2)}$$

$$6) \frac{4}{x + 2} - \frac{6}{x - 5}$$

$$\frac{-2x - 32}{(x + 2)(x - 5)}$$

$$7) \frac{2}{5x - 6} - \frac{5}{x - 2}$$

$$\frac{-23x + 26}{(5x - 6)(x - 2)}$$

$$8) \frac{r + 6}{r - 4} - \frac{6r}{6}$$

$$\frac{-r^2 + 5r + 6}{r - 4}$$

$$9) \frac{5}{m + 4} + \frac{6}{m + 3}$$

$$\frac{11m + 39}{(m + 3)(m + 4)}$$

$$10) \frac{4}{6} + \frac{2}{b - 1}$$

$$\frac{2b + 4}{3(b - 1)}$$

$$11) \frac{n + 4}{2n + 4} + \frac{5n}{2n}$$

$$\frac{3n + 7}{n + 2}$$

$$12) \frac{5}{3} - \frac{3b}{2b - 1}$$

$$\frac{b - 5}{3(2b - 1)}$$

$$13) \frac{4a}{6a^2 - 24a} + 5$$

$$\frac{15a - 58}{3(a - 4)}$$

$$14) \frac{6}{x - 2} - \frac{5x}{2x^2}$$

$$\frac{7x + 10}{2x(x - 2)}$$

$$15) \frac{3}{4v} - \frac{4}{v + 6}$$

$$\frac{-13v + 18}{4v(v + 6)}$$

$$16) \frac{5}{3m^2 + 6m} - \frac{3m}{2}$$

$$\frac{10 - 9m^3 - 18m^2}{6m(m + 2)}$$

$$17) \frac{5}{5n - 5} - \frac{6}{n - 2}$$

$$\frac{-5n + 4}{(n - 1)(n - 2)}$$

$$18) \frac{6}{n - 2} - \frac{6}{n + 2}$$

$$\frac{24}{(n + 2)(n - 2)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{2k}{4k-2} + \frac{2k}{k-4}$

2) $\frac{3}{2x-12} - \frac{x-4}{2x}$

3) $5 - \frac{4x}{x^2 + 2x - 24}$

4) $3 - \frac{6r}{r^2 - 2r - 3}$

5) $\frac{6}{k-6} + \frac{5}{k-2}$

6) $\frac{5}{b+3} + \frac{6}{b-2}$

7) $\frac{4p}{3p-3} + \frac{6p}{2}$

8) $5 + \frac{4}{9v^2 - 9v}$

9) $\frac{2}{k-6} + \frac{4}{k-3}$

10) $\frac{p+6}{12p^2+6p} - 3p$

11) $\frac{3x}{5x+2} + \frac{5x}{x+6}$

12) $\frac{3x}{2x} - \frac{6}{2x-4}$

13) $\frac{p+3}{6p-12} + \frac{3p}{3}$

14) $\frac{3}{5a+1} + \frac{3a}{a+5}$

15) $\frac{5}{b+6} - \frac{b+6}{b+3}$

16) $\frac{4}{2} - \frac{m+5}{9m-18}$

17) $\frac{6}{3} + \frac{n-5}{6n-15}$

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

Assignment

Date _____ Period _____

Simplify each expression.

$$1) \frac{2k}{4k-2} + \frac{2k}{k-4}$$

$$\frac{5k^2 - 6k}{(2k-1)(k-4)}$$

$$2) \frac{3}{2x-12} - \frac{x-4}{2x}$$

$$\frac{13x - x^2 - 24}{2x(x-6)}$$

$$3) 5 - \frac{4x}{x^2 + 2x - 24}$$

$$\frac{5x^2 + 6x - 120}{(x+6)(x-4)}$$

$$4) 3 - \frac{6r}{r^2 - 2r - 3}$$

$$\frac{3r^2 - 12r - 9}{(r+1)(r-3)}$$

$$5) \frac{6}{k-6} + \frac{5}{k-2}$$

$$\frac{11k - 42}{(k-2)(k-6)}$$

$$6) \frac{5}{b+3} + \frac{6}{b-2}$$

$$\frac{11b + 8}{(b+3)(b-2)}$$

$$7) \frac{4p}{3p-3} + \frac{6p}{2}$$

$$\frac{9p^2 - 5p}{3(p-1)}$$

$$8) 5 + \frac{4}{9v^2 - 9v}$$

$$\frac{45v^2 - 45v + 4}{9v(v-1)}$$

$$9) \frac{2}{k-6} + \frac{4}{k-3}$$

$$\frac{6k - 30}{(k-3)(k-6)}$$

$$10) \frac{p+6}{12p^2+6p} - 3p$$

$$\frac{-36p^3 - 18p^2 + p + 6}{6p(2p+1)}$$

$$11) \frac{3x}{5x+2} + \frac{5x}{x+6}$$

$$\frac{28x^2 + 28x}{(5x+2)(x+6)}$$

$$12) \frac{3x}{2x} - \frac{6}{2x-4}$$

$$\frac{3x - 12}{2(x-2)}$$

$$13) \frac{p+3}{6p-12} + \frac{3p}{3}$$

$$\frac{6p^2 - 11p + 3}{6(p-2)}$$

$$14) \frac{3}{5a+1} + \frac{3a}{a+5}$$

$$\frac{6a + 15 + 15a^2}{(5a+1)(a+5)}$$

$$15) \frac{5}{b+6} - \frac{b+6}{b+3}$$

$$\frac{-7b - 21 - b^2}{(b+3)(b+6)}$$

$$16) \frac{4}{2} - \frac{m+5}{9m-18}$$

$$\frac{17m - 41}{9(m-2)}$$

$$17) \frac{6}{3} + \frac{n-5}{6n-15}$$

$$\frac{13n - 35}{3(2n-5)}$$

$$18) \frac{x+1}{2x^2-4x} + \frac{4}{2}$$

$$\frac{4x^2 - 7x + 1}{2x(x-2)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{4}{10k+2} + \frac{5k}{2}$

2) $\frac{n-4}{3n} + \frac{3n+2}{3n+4}$

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

4) $\frac{4}{3} - \frac{3}{2x-2}$

5) $\frac{2}{v+6} + \frac{2}{v+2}$

6) $\frac{5}{6} + \frac{x+3}{x^2+7x+10}$

7) $\frac{6}{2r-5} + \frac{4}{3}$

8) $\frac{a-6}{4a+5} + \frac{3}{6a}$

9) $\frac{4x}{2} - \frac{3x}{2x+2}$

10) $\frac{6}{6m^2} - \frac{4}{m-6}$

11) $\frac{2x}{3} - \frac{6}{x+3}$

12) $2m - \frac{4}{m^2-2m-15}$

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

14) $\frac{2}{6x-12} + 5$

15) $\frac{6n}{n+2} + \frac{2n}{4n}$

16) $\frac{3n}{n+1} - \frac{4}{n+6}$

17) $\frac{5}{n+4} + \frac{5}{n-2}$

18) $\frac{2}{12m^3-20m^2} + 5$

Assignment

Date _____ Period _____

Simplify each expression.

$$1) \frac{4}{10k+2} + \frac{5k}{2}$$

$$\frac{4 + 25k^2 + 5k}{2(5k+1)}$$

$$2) \frac{n-4}{3n} + \frac{3n+2}{3n+4}$$

$$\frac{12n^2 - 2n - 16}{3n(3n+4)}$$

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

$$\frac{25x+3-5x^2}{(5x+1)(x-2)}$$

$$4) \frac{4}{3} - \frac{3}{2x-2}$$

$$\frac{8x-17}{6(x-1)}$$

$$5) \frac{2}{v+6} + \frac{2}{v+2}$$

$$\frac{4v+16}{(v+2)(v+6)}$$

$$6) \frac{5}{6} + \frac{x+3}{x^2+7x+10}$$

$$\frac{5x^2+41x+68}{6(x+2)(x+5)}$$

$$7) \frac{6}{2r-5} + \frac{4}{3}$$

$$\frac{-2+8r}{3(2r-5)}$$

$$8) \frac{a-6}{4a+5} + \frac{3}{6a}$$

$$\frac{2a^2-8a+5}{2a(4a+5)}$$

$$9) \frac{4x}{2} - \frac{3x}{2x+2}$$

$$\frac{4x^2+x}{2(x+1)}$$

$$10) \frac{6}{6m^2} - \frac{4}{m-6}$$

$$\frac{m-6-4m^2}{m^2(m-6)}$$

$$11) \frac{2x}{3} - \frac{6}{x+3}$$

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

$$12) 2m - \frac{4}{m^2-2m-15}$$

$$\frac{2m^3-4m^2-30m-4}{(m+3)(m-5)}$$

$$13) \frac{2m}{3m^2} - \frac{6m}{m-5}$$

$$\frac{2m-10-18m^2}{3m(m-5)}$$

$$14) \frac{2}{6x-12} + 5$$

$$\frac{15x-29}{3(x-2)}$$

$$15) \frac{6n}{n+2} + \frac{2n}{4n}$$

$$\frac{13n+2}{2(n+2)}$$

$$16) \frac{3n}{n+1} - \frac{4}{n+6}$$

$$\frac{3n^2+14n-4}{(n+1)(n+6)}$$

$$17) \frac{5}{n+4} + \frac{5}{n-2}$$

$$\frac{10n+10}{(n+4)(n-2)}$$

$$18) \frac{2}{12m^3-20m^2} + 5$$

$$\frac{30m^3-50m^2+1}{2m^2(3m-5)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{5}{2} + \frac{3p-1}{6p+4}$

2) $\frac{4}{3} + \frac{x-6}{4x^2-6x}$

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

4) $\frac{4}{15b+18} + \frac{5b}{3}$

5) $\frac{6k}{5k+2} - \frac{2}{k-4}$

6) $\frac{3}{p+1} - \frac{2p}{p+4}$

7) $\frac{4p}{p+2} + \frac{2p}{3p-1}$

8) $\frac{6}{n+4} + \frac{5n}{n+2}$

9) $\frac{4}{3x+5} - \frac{6x}{x-3}$

10) $\frac{2x}{3x+15} + \frac{x-5}{3}$

11) $\frac{4}{2} + \frac{n-1}{3n-4}$

12) $\frac{2x}{x+1} - \frac{2}{x+5}$

13) $\frac{2b}{b-2} - \frac{5}{6}$

14) $3 + \frac{5x+6}{x^2-8x+12}$

15) $5b + \frac{b-3}{b^2-3b-4}$

16) $\frac{4b}{9b-6} + \frac{5b}{3}$

17) $\frac{4}{p+5} + \frac{4}{3p-3}$

18) $\frac{3}{r+5} - \frac{2r}{r-3}$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{5}{2} + \frac{3p-1}{6p+4}$

$$\frac{18p+9}{2(3p+2)}$$

2) $\frac{4}{3} + \frac{x-6}{4x^2-6x}$

$$\frac{16x^2-21x-18}{6x(2x-3)}$$

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

$$\frac{n-22+n^2}{(n-2)(n-6)}$$

4) $\frac{4}{15b+18} + \frac{5b}{3}$

$$\frac{4+25b^2+30b}{3(5b+6)}$$

5) $\frac{6k}{5k+2} - \frac{2}{k-4}$

$$\frac{6k^2-34k-4}{(5k+2)(k-4)}$$

6) $\frac{3}{p+1} - \frac{2p}{p+4}$

$$\frac{p+12-2p^2}{(p+1)(p+4)}$$

7) $\frac{4p}{p+2} + \frac{2p}{3p-1}$

$$\frac{14p^2}{(3p-1)(p+2)}$$

8) $\frac{6}{n+4} + \frac{5n}{n+2}$

$$\frac{26n+12+5n^2}{(n+2)(n+4)}$$

9) $\frac{4}{3x+5} - \frac{6x}{x-3}$

$$\frac{-26x-12-18x^2}{(3x+5)(x-3)}$$

10) $\frac{2x}{3x+15} + \frac{x-5}{3}$

$$\frac{2x+x^2-25}{3(x+5)}$$

11) $\frac{4}{2} + \frac{n-1}{3n-4}$

$$\frac{7n-9}{3n-4}$$

12) $\frac{2x}{x+1} - \frac{2}{x+5}$

$$\frac{2x^2+8x-2}{(x+1)(x+5)}$$

13) $\frac{2b}{b-2} - \frac{5}{6}$

$$\frac{7b+10}{6(b-2)}$$

14) $3 + \frac{5x+6}{x^2-8x+12}$

$$\frac{3x^2-19x+42}{(x-2)(x-6)}$$

15) $5b + \frac{b-3}{b^2-3b-4}$

$$\frac{5b^3-15b^2-19b-3}{(b+1)(b-4)}$$

16) $\frac{4b}{9b-6} + \frac{5b}{3}$

$$\frac{-2b+5b^2}{3b-2}$$

17) $\frac{4}{p+5} + \frac{4}{3p-3}$

$$\frac{16p+8}{3(p+5)(p-1)}$$

18) $\frac{3}{r+5} - \frac{2r}{r-3}$

$$\frac{-7r-9-2r^2}{(r+5)(r-3)}$$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{5}{4} + \frac{5}{b-6}$

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

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

4) $\frac{5}{x-1} + \frac{2x}{x+4}$

5) $\frac{3x}{x-2} - \frac{5}{3x^2}$

6) $\frac{6}{n+1} - \frac{6}{n-3}$

7) $\frac{6}{2x+8} + \frac{4x}{3}$

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

9) $2v - \frac{5}{2v^2-3v+1}$

10) $\frac{x+3}{10x^2+4x} + \frac{5x}{3x}$

11) $\frac{3x+6}{x-2} + \frac{4}{2x^2}$

12) $\frac{m+5}{m-1} - \frac{4m}{5m^2}$

13) $\frac{2}{a+1} + \frac{5}{5a+4}$

14) $\frac{4}{r+5} + \frac{2r}{r-5}$

15) $\frac{3}{3n} - \frac{6}{2n^2-10n}$

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

17) $\frac{3x}{2} - \frac{5x+3}{3x^2-18x}$

18) $\frac{3}{3x} - \frac{4}{3x-3}$

Assignment

Date _____ Period _____

Simplify each expression.

1) $\frac{5}{4} + \frac{5}{b-6}$

$$\frac{5b-10}{4(b-6)}$$

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

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

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

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

4) $\frac{5}{x-1} + \frac{2x}{x+4}$

$$\frac{3x+20+2x^2}{(x+4)(x-1)}$$

5) $\frac{3x}{x-2} - \frac{5}{3x^2}$

$$\frac{9x^3-5x+10}{3x^2(x-2)}$$

6) $\frac{6}{n+1} - \frac{6}{n-3}$

$$-\frac{24}{(n+1)(n-3)}$$

7) $\frac{6}{2x+8} + \frac{4x}{3}$

$$\frac{9+4x^2+16x}{3(x+4)}$$

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

$$\frac{-8a^3-32a^2+a-4}{2a(a+4)}$$

9) $2v - \frac{5}{2v^2-3v+1}$

$$\frac{4v^3-6v^2+2v-5}{(2v-1)(v-1)}$$

10) $\frac{x+3}{10x^2+4x} + \frac{5x}{3x}$

$$\frac{23x+9+50x^2}{6x(5x+2)}$$

11) $\frac{3x+6}{x-2} + \frac{4}{2x^2}$

$$\frac{3x^3+6x^2+2x-4}{x^2(x-2)}$$

12) $\frac{m+5}{m-1} - \frac{4m}{5m^2}$

$$\frac{5m^2+21m+4}{5m(m-1)}$$

13) $\frac{2}{a+1} + \frac{5}{5a+4}$

$$\frac{15a+13}{(5a+4)(a+1)}$$

14) $\frac{4}{r+5} + \frac{2r}{r-5}$

$$\frac{14r-20+2r^2}{(r+5)(r-5)}$$

15) $\frac{3}{3n} - \frac{6}{2n^2-10n}$

$$\frac{n-8}{n(n-5)}$$

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

$$\frac{4x-8+20x^3}{5x^2(x-2)}$$

17) $\frac{3x}{2} - \frac{5x+3}{3x^2-18x}$

$$\frac{9x^3-54x^2-10x-6}{6x(x-6)}$$

18) $\frac{3}{3x} - \frac{4}{3x-3}$

$$\frac{-x-3}{3x(x-1)}$$

Assignment

Simplify each expression.

1) $\frac{6}{a+4} - \frac{4a}{a-2}$

2) $\frac{6}{3x+4} + \frac{3}{4}$

3) $\frac{x+1}{3x^2+3x} + \frac{6x}{3x}$

4) $\frac{5}{2b} - \frac{6b}{3b+12}$

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

6) $\frac{5x}{x-5} - \frac{5}{3x+5}$

7) $\frac{4}{3v^2+18v} + \frac{2}{3}$

8) $2 - \frac{5}{45b^2-45b}$

9) $\frac{2n-4}{27n^2-36n} + 2n$

10) $\frac{2}{x+4} - \frac{4x}{6}$

11) $\frac{k+2}{k-5} + \frac{6}{5}$

12) $\frac{3}{3p} + \frac{p-6}{2p-8}$

13) $\frac{3}{2r-3} - \frac{3}{r-5}$

14) $\frac{3n}{6n-30} + 2n$

15) $\frac{6}{3} - \frac{3x}{15x^2+15x}$

16) $\frac{5}{8n^3-8n^2} + 2$

17) $\frac{3}{4} + \frac{n+2}{n-2}$

18) $\frac{x+3}{5} - \frac{x-1}{x+2}$

Assignment

Simplify each expression.

$$1) \frac{6}{a+4} - \frac{4a}{a-2}$$

$$\frac{-10a - 12 - 4a^2}{(a+4)(a-2)}$$

$$2) \frac{6}{3x+4} + \frac{3}{4}$$

$$\frac{36 + 9x}{4(3x+4)}$$

$$3) \frac{x+1}{3x^2+3x} + \frac{6x}{3x}$$

$$\frac{6x+1}{3x}$$

$$4) \frac{5}{2b} - \frac{6b}{3b+12}$$

$$\frac{5b+20-4b^2}{2b(b+4)}$$

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

$$\frac{2r-28}{(r+4)(r-5)}$$

$$6) \frac{5x}{x-5} - \frac{5}{3x+5}$$

$$\frac{15x^2+20x+25}{(3x+5)(x-5)}$$

$$7) \frac{4}{3v^2+18v} + \frac{2}{3}$$

$$\frac{4+2v^2+12v}{3v(v+6)}$$

$$8) 2 - \frac{5}{45b^2-45b}$$

$$\frac{18b^2-18b-1}{9b(b-1)}$$

$$9) \frac{2n-4}{27n^2-36n} + 2n$$

$$\frac{54n^3-72n^2+2n-4}{9n(3n-4)}$$

$$10) \frac{2}{x+4} - \frac{4x}{6}$$

$$\frac{6-2x^2-8x}{3(x+4)}$$

$$11) \frac{k+2}{k-5} + \frac{6}{5}$$

$$\frac{11k-20}{5(k-5)}$$

$$12) \frac{3}{3p} + \frac{p-6}{2p-8}$$

$$\frac{-4p-8+p^2}{2p(p-4)}$$

$$13) \frac{3}{2r-3} - \frac{3}{r-5}$$

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

$$14) \frac{3n}{6n-30} + 2n$$

$$\frac{4n^2-19n}{2(n-5)}$$

$$15) \frac{6}{3} - \frac{3x}{15x^2+15x}$$

$$\frac{10x+9}{5(x+1)}$$

$$16) \frac{5}{8n^3-8n^2} + 2$$

$$\frac{16n^3-16n^2+5}{8n^2(n-1)}$$

$$17) \frac{3}{4} + \frac{n+2}{n-2}$$

$$\frac{7n+2}{4(n-2)}$$

$$18) \frac{x+3}{5} - \frac{x-1}{x+2}$$

$$\frac{x^2+11}{5(x+2)}$$