Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{1}{k^2+7k+10} - \frac{2k-7}{k^2+7k+10} = \frac{1}{k+2}$

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

3) $\frac{1}{x-5} = \frac{1}{x^2-x-20} - \frac{8x+3}{x^2-x-20}$

4) $\frac{a-3}{2a^2+18a+28} + \frac{1}{2a^2+18a+28} = \frac{1}{a^2+9a+14}$

5) $\frac{8}{p-5} = 1 + \frac{1}{p-5}$

6) $\frac{1}{3x-12} - \frac{x+8}{3x^2-12x} = \frac{1}{x-4}$

7) $\frac{1}{n-8} = \frac{1}{n+4} + \frac{4n+8}{n^2-4n-32}$

8) $\frac{2m-14}{m+5} + \frac{7}{m+5} = \frac{1}{4m+20}$

9) $1 = \frac{1}{5r} - \frac{4r-8}{5r}$

10) $\frac{1}{3} + \frac{1}{3m-18} = \frac{2}{m-6}$

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

12) $\frac{1}{x^2-12x+35} + \frac{2}{x-5} = \frac{1}{x-7}$

13) $\frac{b-1}{b^2-7b} = \frac{1}{b-7} + \frac{1}{b}$

14) $\frac{v-3}{v^2-8v} = \frac{6}{v-8} - \frac{1}{v^2-8v}$

15) $\frac{1}{x} + \frac{2x-7}{x^2-2x} = \frac{x-8}{x^2-2x}$

16) $1 + \frac{1}{7a} = \frac{a-4}{7a}$

17) $\frac{4}{k^2+5k-6} = \frac{1}{k^2+5k-6} - \frac{1}{k+6}$

18) $\frac{1}{p^2-7p+10} + \frac{p-4}{p^2-7p+10} = \frac{8}{p-5}$

19) $\frac{7}{n-2} = 5 - \frac{6}{n-2}$

20) $\frac{3}{m^2-m} + \frac{1}{2m} = \frac{1}{m^2-m}$

21) $\frac{1}{r^2+6r}+\frac{1}{r+6}=\frac{7}{r^2+6r}$

22) $\frac{1}{x-6}=\frac{1}{7x^2-39x-18}-\frac{x-3}{7x^2-39x-18}$

23) $3-\frac{1}{4n-8}=\frac{2}{n-2}$

24) $\frac{6}{x^2-x-20}=\frac{1}{x-5}-\frac{1}{x^2-x-20}$

Answers to Assignment (ID: 1)

1) $\{1\}$

2) $\{8\}$

3) $\left\{-\frac{2}{3}\right\}$

4) $\{4\}$

5) $\{12\}$

6) $\left\{-\frac{8}{3}\right\}$

7) $\{1\}$

8) $\left\{\frac{29}{8}\right\}$

9) $\{1\}$

10) $\{11\}$

11) $\left\{\frac{11}{2}\right\}$

12) $\{8\}$

13) $\{6\}$

14) $\left\{-\frac{2}{5}\right\}$

15) $\left\{\frac{1}{2}\right\}$

16) $\left\{-\frac{5}{6}\right\}$

17) $\{-2\}$

18) $\left\{\frac{13}{7}\right\}$

19) $\left\{\frac{23}{5}\right\}$

20) $\{-3\}$

21) $\{6\}$

22) $\left\{\frac{1}{8}\right\}$

23) $\left\{\frac{11}{4}\right\}$

24) $\{3\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{6}{v+5} = \frac{1}{v+5} - 1$

2) $\frac{1}{n^2-2n-48} = \frac{1}{n+6} - \frac{8}{n^2-2n-48}$

3) $\frac{7}{6b+5} - \frac{1}{6b^2-43b-40} = \frac{2}{6b+5}$

4) $\frac{7}{x+5} + \frac{4x-20}{x+5} = 1$

5) $\frac{1}{x^2+x-30} = \frac{4}{x^2+x-30} + \frac{1}{x+6}$

6) $\frac{8k-24}{k-5} + \frac{7}{k-5} = 1$

7) $\frac{5}{a^2+4a} = \frac{5}{a} + \frac{1}{a^2+4a}$

8) $\frac{8}{3} = \frac{4}{3} - \frac{2x-14}{x+1}$

9) $\frac{1}{x-8} - \frac{1}{x^2-14x+48} = \frac{3}{x^2-14x+48}$

10) $\frac{6}{n^2-3n-40} = \frac{1}{n^2-3n-40} - \frac{7n+28}{3n^2-9n-120}$

11) $\frac{n+8}{6n+6} + \frac{1}{12n+12} = \frac{1}{2}$

12) $1 + \frac{1}{x-5} = \frac{4}{x-5}$

13) $\frac{4p-20}{p^2-6p} + \frac{1}{2p^2-12p} = \frac{1}{p}$

14) $\frac{5}{b^2-b-42} = \frac{8}{b^2-b-42} + \frac{1}{b+6}$

15) $\frac{7}{n^2+6n+8} + \frac{1}{n+2} = \frac{1}{n^2+6n+8}$

16) $1 - \frac{2x+16}{9x} = \frac{5x+5}{9x}$

17) $\frac{1}{b-5} = \frac{6}{b-5} + 3$

18) $\frac{1}{m+6} - \frac{1}{m} = \frac{m-5}{m^2+6m}$

19) $\frac{1}{2n+10} + \frac{n+3}{n+5} = \frac{3n+5}{2n+10}$

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

21) $\frac{1}{x^2 - x} + \frac{5}{x} = \frac{6}{x^2 - x}$

22) $\frac{1}{r + 6} + \frac{1}{r^2 + 6r} = \frac{4}{r^2 + 6r}$

23) $\frac{3}{a - 7} + \frac{1}{a + 1} = \frac{6a - 7}{a^2 - 6a - 7}$

24) $\frac{1}{v^2 - v} = \frac{5}{v^2 - v} + \frac{1}{v}$

Answers to Assignment (ID: 2)

1) $\{-10\}$

2) $\{17\}$

3) $\left\{\frac{41}{5}\right\}$

4) $\{6\}$

5) $\{2\}$

6) $\left\{\frac{12}{7}\right\}$

7) $\left\{-\frac{16}{5}\right\}$

8) $\left\{\frac{19}{5}\right\}$

9) $\{10\}$

10) $\left\{-\frac{43}{7}\right\}$

11) $\left\{\frac{11}{4}\right\}$

12) $\{8\}$

13) $\left\{\frac{9}{2}\right\}$

14) $\{4\}$

15) $\{-10\}$

16) $\left\{\frac{21}{2}\right\}$

17) $\left\{\frac{10}{3}\right\}$

18) $\{-1\}$

19) $\{2\}$

20) $\left\{-\frac{1}{5}\right\}$

21) $\{2\}$

22) $\{3\}$

23) $\left\{\frac{3}{2}\right\}$

24) $\{-3\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{3}{n^2+5n} = \frac{1}{n} + \frac{1}{n^2+5n}$

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

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

4) $\frac{8k-5}{k+5} - \frac{1}{k+5} = 1$

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

6) $\frac{18x+42}{5x+2} + \frac{x+4}{5x+2} = 1$

7) $\frac{m+2}{m^2+5m} = \frac{1}{m^2+5m} - \frac{7}{m}$

8) $\frac{1}{b-5} = \frac{b+6}{b^2-3b-10} + \frac{8b-64}{b^2-3b-10}$

9) $\frac{4}{n-3} + \frac{8}{n^2+n-12} = \frac{n}{n^2+n-12}$

10) $1 - \frac{1}{n-6} = \frac{4}{n-6}$

11) $\frac{4}{v^2-5v} = \frac{1}{v} - \frac{1}{v^2-5v}$

12) $\frac{7}{4k^2+12k} + \frac{1}{k} = \frac{1}{k^2+3k}$

13) $\frac{7a-8}{a^2-6a} = \frac{1}{a} + \frac{1}{a^2-6a}$

14) $\frac{n+4}{8n} = \frac{1}{8n} - 1$

15) $\frac{x-1}{x^2+8x+15} + \frac{1}{x^2+8x+15} = \frac{2}{x+3}$

16) $\frac{x+7}{3x+18} + \frac{1}{x+6} = \frac{x-3}{x+6}$

17) $\frac{1}{x^2-10x+24} - \frac{1}{x-4} = \frac{x+5}{x^2-10x+24}$

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

19) $\frac{2}{3p^2-7p} = \frac{1}{3p-7} + \frac{1}{3p^2-7p}$

20) $\frac{2}{b-3} = \frac{1}{b-3} + 1$

21) $\frac{7}{n^2-4n} + \frac{3}{n} = \frac{1}{2n-8}$

22) $\frac{1}{r^2+r} + \frac{3}{r} = \frac{7}{r^2+r}$

23) $\frac{3x+24}{x^2-5x+4} = \frac{1}{x-4} + \frac{1}{x-1}$

24) $\frac{4}{n^2-8n+7} = \frac{1}{n-7} - \frac{1}{n^2-8n+7}$

Answers to Assignment (ID: 3)

1) $\{-3\}$

2) $\{-11\}$

3) $\{0\}$

4) $\left\{\frac{11}{7}\right\}$

5) $\left\{-\frac{7}{2}\right\}$

6) $\left\{-\frac{22}{7}\right\}$

7) $\left\{-\frac{9}{2}\right\}$

8) $\left\{\frac{15}{2}\right\}$

9) $\{-8\}$

10) $\{11\}$

11) $\{10\}$

12) $\left\{-\frac{15}{4}\right\}$

13) $\left\{\frac{1}{2}\right\}$

14) $\left\{-\frac{1}{3}\right\}$

15) $\{-10\}$

16) $\left\{\frac{19}{2}\right\}$

17) $\{1\}$

18) $\{6\}$

19) $\{1\}$

20) $\{4\}$

21) $\{2\}$

22) $\{1\}$

23) $\{-29\}$

24) $\{6\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

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

2) $\frac{4}{x} = \frac{x+8}{x^2-3x} + \frac{1}{2x^2-6x}$

3) $\frac{4}{v^2+6v} = \frac{1}{v^2+6v} + \frac{7}{v+6}$

4) $\frac{a+4}{a^2-6a+8} = \frac{1}{a-4} + \frac{1}{a-2}$

5) $\frac{4}{p-4} + \frac{1}{p^2+p-20} = \frac{7}{p^2+p-20}$

6) $\frac{7}{n^2-7n-8} = \frac{5}{n+1} - \frac{4}{n^2-7n-8}$

7) $1 + \frac{1}{x+5} = \frac{2}{x+5}$

8) $\frac{5}{k+3} = 1 + \frac{1}{k+3}$

9) $\frac{3b-6}{2b} = 1 + \frac{b+8}{b}$

10) $\frac{1}{r-5} + \frac{1}{r^2-5r} = \frac{4}{r^2-5r}$

11) $3 + \frac{1}{8m} = \frac{7}{8m}$

12) $\frac{4v-7}{3v} + \frac{v+2}{3v} = 1$

13) $\frac{6x+18}{x^2-5x} + \frac{1}{x^2-5x} = \frac{7}{x}$

14) $\frac{b+4}{4b-8} = 1 - \frac{b-5}{b-2}$

15) $\frac{8}{n^2-13n+42} = \frac{1}{n-6} + \frac{1}{n^2-13n+42}$

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

17) $\frac{8}{k^2+2k} + \frac{1}{k+2} = \frac{3}{k^2+2k}$

18) $\frac{1}{a+1} = \frac{7a+56}{a^2+a} + \frac{6}{a^2+a}$

19) $4 - \frac{1}{x-4} = \frac{2}{x-4}$

20) $\frac{1}{x-7} = \frac{4x+24}{x^2-7x} + \frac{1}{x^2-7x}$

21) $\frac{4}{x^2-x-30} - \frac{8}{x+5} = \frac{1}{x^2-x-30}$

22) $\frac{1}{2m^2+16m} + \frac{4}{m} = \frac{m-7}{2m^2+16m}$

23) $\frac{8}{p} = \frac{1}{p} + \frac{1}{p-1}$

24) $\frac{1}{2n+7} - \frac{7}{2n^2+19n+42} = \frac{4n-8}{2n^2+19n+42}$

Answers to Assignment (ID: 4)

1) $\{-10\}$

2) $\left\{\frac{41}{6}\right\}$

3) $\left\{\frac{3}{7}\right\}$

4) $\{10\}$

5) $\left\{-\frac{7}{2}\right\}$

6) $\left\{\frac{51}{5}\right\}$

7) $\{-4\}$

8) $\{1\}$

9) $\{-22\}$

10) $\{3\}$

11) $\left\{\frac{1}{4}\right\}$

12) $\left\{\frac{5}{2}\right\}$

13) $\{54\}$

14) $\{8\}$

15) $\{14\}$

16) $\{-5\}$

17) $\{-5\}$

18) $\left\{-\frac{31}{3}\right\}$

19) $\left\{\frac{19}{4}\right\}$

20) $\left\{-\frac{25}{3}\right\}$

21) $\left\{\frac{51}{8}\right\}$

22) $\left\{-\frac{72}{7}\right\}$

23) $\left\{\frac{7}{6}\right\}$

24) $\left\{\frac{7}{3}\right\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{8}{x-1} = \frac{1}{x-1} + 1$

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

3) $\frac{1}{b} - \frac{b+7}{8b^2-3b} = \frac{1}{8b-3}$

4) $\frac{1}{24n} - \frac{n-4}{6n} = \frac{n-1}{24n}$

5) $\frac{2}{r^2+6r} + \frac{1}{r} = \frac{8r+24}{r^2+6r}$

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

7) $\frac{4}{x-7} - \frac{1}{x^2-x-42} = \frac{1}{x-7}$

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

9) $\frac{8}{v+5} + \frac{4}{v^2+5v} = \frac{1}{v^2+5v}$

10) $\frac{4}{k} = \frac{1}{k} + 1$

11) $\frac{1}{x} - \frac{1}{x^2-4x} = \frac{2}{x^2-4x}$

12) $\frac{1}{2a} = \frac{3}{a+7} - \frac{1}{a^2+7a}$

13) $\frac{10p-4}{5p+1} - \frac{1}{10p+2} = \frac{1}{2}$

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

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

16) $\frac{1}{m-6} + \frac{2}{m^2-6m} = \frac{5}{m^2-6m}$

17) $\frac{4}{r^2+3r} + \frac{1}{r} = \frac{1}{r^2+3r}$

18) $\frac{3}{b} = 1 + \frac{1}{b}$

19) $\frac{2}{x^2+7x} + \frac{1}{x+7} = \frac{8}{x^2+7x}$

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

21) $\frac{6n-3}{n^2-4n} - \frac{2}{n^2-4n} = \frac{1}{n}$

22) $\frac{a}{a-8} - \frac{1}{a-8} = 5$

23) $\frac{1}{n^2 + 14n + 48} - \frac{8}{n + 8} = \frac{3}{n^2 + 14n + 48}$

24) $\frac{1}{x^2 - 6x} + \frac{7x + 28}{x^2 - 6x} = \frac{5}{x}$

Answers to Assignment (ID: 5)

1) $\{8\}$

2) $\{1\}$

3) $\left\{\frac{5}{3}\right\}$

4) $\left\{\frac{18}{5}\right\}$

5) $\left\{-\frac{16}{7}\right\}$

6) $\left\{-\frac{15}{2}\right\}$

7) $\left\{-\frac{17}{3}\right\}$

8) $\left\{-\frac{29}{6}\right\}$

9) $\left\{-\frac{3}{8}\right\}$

10) $\{3\}$

11) $\{7\}$

12) $\left\{\frac{9}{5}\right\}$

13) $\left\{\frac{2}{3}\right\}$

14) $\{8\}$

15) $\{-8\}$

16) $\{3\}$

17) $\{-6\}$

18) $\{2\}$

19) $\{6\}$

20) $\left\{-\frac{12}{7}\right\}$

21) $\left\{\frac{1}{5}\right\}$

22) $\left\{\frac{39}{4}\right\}$

23) $\left\{-\frac{25}{4}\right\}$

24) $\left\{-\frac{59}{2}\right\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{1}{2n} + 1 = \frac{n+7}{2n}$

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

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

4) $\frac{8}{x+7} + \frac{1}{x} = \frac{1}{x+7}$

5) $\frac{1}{k^2 - 6k} = \frac{1}{k} + \frac{3}{k^2 - 6k}$

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

7) $\frac{1}{6x - 6} - \frac{1}{2x - 2} = \frac{x+1}{6x^2 - 6x}$

8) $\frac{1}{r+6} - \frac{5}{r+3} = \frac{1}{r+3}$

9) $\frac{1}{b^2 + 5b} + \frac{7}{b} = \frac{8}{b^2 + 5b}$

10) $\frac{1}{n+4} + \frac{5n - 25}{n+4} = 1$

11) $\frac{1}{v^2 - 5v} + \frac{1}{v} = \frac{6}{v}$

12) $\frac{1}{n^2 - 9n + 20} + \frac{1}{n-4} = \frac{4}{n-4}$

13) $\frac{7}{a^2 - 5a} = \frac{1}{a} - \frac{1}{a^2 - 5a}$

14) $\frac{6x + 48}{x^2 - 2x - 35} = \frac{1}{x^2 - 2x - 35} + \frac{1}{x-7}$

15) $\frac{1}{a} = \frac{2}{a} + \frac{1}{a^2 - 6a}$

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

17) $\frac{1}{k} + \frac{1}{k^2 - 6k} = \frac{5}{k^2 - 6k}$

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

19) $\frac{3}{2x^2 - 20x + 48} + \frac{x+8}{x^2 - 10x + 24} = \frac{1}{x^2 - 10x + 24}$

20) $\frac{1}{3m} + 1 = \frac{4}{3m}$

21) $\frac{1}{4n^2 + 20n} = \frac{3n - 3}{4n^2 + 20n} + \frac{1}{2n^2 + 10n}$

22) $\frac{r+5}{4r^2+24r-64} = \frac{1}{4r+32} + \frac{3}{4r+32}$

23) $\frac{3}{p^2-8p+16} + \frac{1}{p-4} = \frac{1}{p^2-8p+16}$

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

Answers to Assignment (ID: 6)

1) $\{6\}$

2) $\{-9\}$

3) $\{4\}$

4) $\left\{-\frac{7}{8}\right\}$

5) $\{4\}$

6) $\left\{-\frac{23}{4}\right\}$

7) $\left\{-\frac{1}{3}\right\}$

8) $\left\{-\frac{33}{5}\right\}$

9) $\{-4\}$

10) $\{7\}$

11) $\left\{\frac{26}{5}\right\}$

12) $\left\{\frac{16}{3}\right\}$

13) $\{13\}$

14) $\left\{-\frac{42}{5}\right\}$

15) $\{5\}$

16) $\{6\}$

17) $\{10\}$

18) $\left\{-\frac{7}{5}\right\}$

19) $\left\{-\frac{17}{2}\right\}$

20) $\{1\}$

21) $\left\{\frac{2}{3}\right\}$

22) $\left\{\frac{13}{3}\right\}$

23) $\{2\}$

24) $\{2\}$

ID: 7

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $1 + \frac{2}{5v} = \frac{4v + 32}{5v}$

2) $\frac{b + 5}{3b^2 + 9b} = \frac{1}{3b} + \frac{1}{b + 3}$

3) $\frac{4n - 4}{7n} = 1 - \frac{1}{7n}$

4) $\frac{1}{3x - 24} - \frac{x - 4}{x - 8} = \frac{8}{3}$

5) $\frac{1}{n + 7} - \frac{7n - 7}{n^2 + 7n} = \frac{2n - 7}{n^2 + 7n}$

6) $\frac{5}{a^2 + 7a} - \frac{1}{a} = \frac{1}{a^2 + 7a}$

7) $\frac{1}{x + 6} + 1 = \frac{4}{x + 6}$

8) $\frac{7}{4k + 20} = \frac{3}{2} + \frac{1}{k + 5}$

9) $\frac{m + 8}{8m} = \frac{1}{2m} - \frac{m + 2}{4m}$

10) $\frac{x + 1}{x^2 + 6x} = \frac{1}{x^2 + 6x} - \frac{1}{x}$

11) $\frac{5}{n^2 - 2n - 48} = \frac{1}{n + 6} - \frac{1}{n^2 - 2n - 48}$

12) $\frac{1}{x - 4} = 6 + \frac{7}{x - 4}$

13) $\frac{1}{p} = \frac{7}{p^2 + 5p} - \frac{p + 6}{p^2 + 5p}$

14) $1 + \frac{3}{x - 5} = \frac{6}{x - 5}$

15) $\frac{1}{4n} + 2 = \frac{1}{2n}$

16) $\frac{1}{2r} - 2 = \frac{r - 4}{2r}$

17) $\frac{1}{b + 4} - 1 = \frac{1}{3b + 12}$

18) $\frac{1}{a - 6} - \frac{6}{a^2 - a - 30} = \frac{3}{a + 5}$

19) $\frac{1}{n + 8} = \frac{n - 5}{n^2 + 16n + 64} + \frac{n + 1}{n^2 + 16n + 64}$

20) $\frac{1}{v} = \frac{6}{v} - \frac{1}{v^2 - 6v}$

21) $\frac{1}{x + 1} - \frac{1}{x^2 + x} = \frac{6}{x + 1}$

22) $\frac{5}{3n^2 - n} = \frac{1}{3n - 1} + \frac{1}{3n^2 - n}$

23) $\frac{1}{4x-1} - 1 = \frac{5}{4x-1}$

24) $\frac{3}{k^2-2k} = \frac{7}{3k^2-6k} + \frac{5}{3k}$

Answers to Assignment (ID: 7)

1) $\{30\}$

2) $\left\{\frac{2}{3}\right\}$

3) $\{-1\}$

4) $\{7\}$

5) $\left\{\frac{7}{4}\right\}$

6) $\{-3\}$

7) $\{-3\}$

8) $\left\{-\frac{9}{2}\right\}$

9) $\left\{-\frac{8}{3}\right\}$

10) $\{-3\}$

11) $\{14\}$

12) $\{3\}$

13) $\{-2\}$

14) $\{8\}$

15) $\left\{\frac{1}{8}\right\}$

16) $\{1\}$

17) $\left\{-\frac{10}{3}\right\}$

18) $\left\{\frac{17}{2}\right\}$

19) $\{12\}$

20) $\left\{\frac{31}{5}\right\}$

21) $\left\{-\frac{1}{5}\right\}$

22) $\{4\}$

23) $\left\{-\frac{3}{4}\right\}$

24) $\left\{\frac{12}{5}\right\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

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

2) $\frac{1}{m-1} + \frac{1}{m} = \frac{8}{m}$

3) $\frac{7x-42}{x} = 1 - \frac{2}{x}$

4) $\frac{1}{r+8} - 1 = \frac{8}{r+8}$

5) $\frac{1}{n+4} + \frac{1}{5n-5} = \frac{n-8}{5n^2+15n-20}$

6) $\frac{2}{x+7} = \frac{8x-64}{x^2+7x} - \frac{1}{x}$

7) $\frac{1}{b} = \frac{b+6}{b^2+7b} + \frac{b-3}{b^2+7b}$

8) $\frac{1}{2n-14} - \frac{5n}{4n^2-24n-28} = \frac{5}{4n+4}$

9) $\frac{3}{v} - \frac{1}{v^2-7v} = \frac{7}{v^2-7v}$

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

11) $\frac{6}{n^2-5n-6} = \frac{7}{n^2-5n-6} + \frac{1}{n-6}$

12) $\frac{x-6}{4x-8} + \frac{1}{4x-8} = 1$

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

14) $3 - \frac{1}{n-4} = \frac{4}{n-4}$

15) $\frac{1}{2p} + \frac{1}{2p-12} = \frac{3p+12}{p^2-6p}$

16) $4 = \frac{1}{x} - \frac{x+8}{2x}$

17) $\frac{5}{m-5} - \frac{3m}{m^2-3m-10} = \frac{1}{m-5}$

18) $\frac{1}{3b-12} = \frac{1}{3b^2-12b} + \frac{3}{b}$

19) $\frac{8}{p^2+5p} = \frac{1}{p^2+5p} - \frac{1}{p+5}$

20) $\frac{3}{x^2+3x-18} = \frac{1}{x^2+3x-18} + \frac{7}{x+6}$

21) $\frac{x+6}{x+2} - 1 = \frac{4x-16}{x+2}$

22) $\frac{1}{r-3} = 1 - \frac{8}{r-3}$

23) $\frac{1}{8n^2 - 6n} = \frac{1}{8n - 6} + \frac{2}{4n^2 - 3n}$

24) $\frac{1}{n + 4} = \frac{5}{n} - \frac{1}{n}$

Answers to Assignment (ID: 8)

1) $\{6\}$

2) $\left\{\frac{7}{6}\right\}$

3) $\left\{\frac{20}{3}\right\}$

4) $\{-15\}$

5) $\left\{-\frac{7}{5}\right\}$

6) $\left\{\frac{71}{5}\right\}$

7) $\{4\}$

8) $\left\{\frac{37}{8}\right\}$

9) $\left\{\frac{29}{3}\right\}$

10) $\{4\}$

11) $\{-2\}$

12) $\{1\}$

13) $\{2\}$

14) $\left\{\frac{17}{3}\right\}$

15) $\left\{-\frac{15}{2}\right\}$

16) $\left\{-\frac{2}{3}\right\}$

17) $\{-8\}$

18) $\left\{\frac{35}{8}\right\}$

19) $\{-7\}$

20) $\left\{\frac{23}{7}\right\}$

21) $\{5\}$

22) $\{12\}$

23) $\{-3\}$

24) $\left\{-\frac{16}{3}\right\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

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

2) $\frac{1}{6x} + \frac{x+2}{6x} = 1$

3) $\frac{k+6}{k^2+8k} = \frac{1}{k} - \frac{3}{k}$

4) $\frac{1}{n^2+7n} - \frac{6n+36}{n^2+7n} = \frac{1}{n}$

5) $\frac{1}{a^2+3a+2} = \frac{1}{a+1} + \frac{5}{a^2+3a+2}$

6) $\frac{1}{x} = \frac{8}{x} - \frac{1}{x^2+6x}$

7) $\frac{7}{7x+3} - 1 = \frac{1}{7x+3}$

8) $\frac{1}{p^2+8p} + \frac{1}{p} = \frac{3}{p^2+8p}$

9) $1 = \frac{7n-56}{n} - \frac{n-8}{n}$

10) $\frac{5}{n+6} + 1 = \frac{1}{n+6}$

11) $\frac{7}{r^2+6r} - \frac{6}{r+6} = \frac{1}{r^2+6r}$

12) $\frac{1}{x^2+6x} + \frac{x-4}{x^2+6x} = \frac{5}{x}$

13) $\frac{7m+49}{3m^2+15m} - \frac{m-6}{3m^2+15m} = \frac{2}{3m+15}$

14) $6 = \frac{1}{b+6} - \frac{b+1}{b+6}$

15) $\frac{7}{v^2-4v} = \frac{1}{v^2-4v} + \frac{6}{v}$

16) $\frac{4}{a^2-4a} = \frac{1}{a-4} + \frac{1}{a^2-4a}$

17) $\frac{5}{n} + \frac{1}{n^2+n} = \frac{2}{n^2+n}$

18) $1 = \frac{k+1}{2k-7} + \frac{7k-49}{2k-7}$

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

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

21) $\frac{1}{20r} = \frac{1}{4} - \frac{1}{10r}$

22) $\frac{7}{n^2-3n} = \frac{1}{n} - \frac{1}{2n^2-6n}$

23) $\frac{x-5}{x^2-7x} = \frac{1}{x^2-7x} + \frac{2}{x}$

24) $\frac{6}{m^2+8m} = \frac{5}{m} + \frac{1}{m^2+8m}$

Answers to Assignment (ID: 9)

1) $\left\{\frac{7}{6}\right\}$

2) $\left\{\frac{3}{5}\right\}$

3) $\left\{-\frac{22}{3}\right\}$

4) $\{-6\}$

5) $\{-6\}$

6) $\left\{-\frac{41}{7}\right\}$

7) $\left\{\frac{3}{7}\right\}$

8) $\{-6\}$

9) $\left\{\frac{48}{5}\right\}$

10) $\{-10\}$

11) $\{1\}$

12) $\left\{-\frac{33}{4}\right\}$

13) $\left\{-\frac{55}{4}\right\}$

14) $\left\{-\frac{36}{7}\right\}$

15) $\{5\}$

16) $\{3\}$

17) $\left\{-\frac{4}{5}\right\}$

18) $\left\{\frac{41}{6}\right\}$

19) $\left\{\frac{16}{3}\right\}$

20) $\left\{\frac{3}{2}\right\}$

21) $\left\{\frac{3}{5}\right\}$

22) $\left\{\frac{21}{2}\right\}$

23) $\{8\}$

24) $\{-7\}$

Name_____

Assignment

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{4}{x} = \frac{1}{2x} + 1$

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

3) $\frac{b + 5}{b^2 + b} + \frac{1}{b} = \frac{7}{b}$

4) $1 + \frac{1}{8n} = \frac{1}{n}$

5) $\frac{7r - 2}{r^2 + 6r} + \frac{1}{r} = \frac{1}{r + 6}$

6) $\frac{1}{a} + \frac{3a - 6}{a} = 8$

7) $1 + \frac{5}{4v} = \frac{7}{4v}$

8) $\frac{1}{12x - 12} = \frac{1}{3x} + \frac{7x + 56}{4x^2 - 4x}$

9) $1 = \frac{4n - 12}{n + 7} - \frac{n + 2}{n + 7}$

10) $\frac{x - 1}{x^2 + 7x} + \frac{x - 8}{x^2 + 7x} = \frac{6}{x + 7}$

11) $\frac{1}{x^2 + 7x} = \frac{6}{x^2 + 7x} - \frac{1}{x}$

12) $\frac{7}{k - 7} + \frac{4k - 8}{k - 7} = 1$

13) $\frac{7}{8x} + 1 = \frac{x - 1}{8x}$

14) $\frac{6}{n + 6} - \frac{1}{n^2 + 12n + 36} = \frac{8}{n^2 + 12n + 36}$

15) $\frac{5}{p} = \frac{p + 8}{p^2 + 6p} + \frac{7p + 21}{p^2 + 6p}$

16) $5 + \frac{1}{2r + 6} = \frac{5}{2r + 6}$

17) $\frac{5}{x - 4} - 4 = \frac{4x + 4}{x - 4}$

18) $\frac{8}{n^2 - 4n} = \frac{1}{n - 4} + \frac{3}{n^2 - 4n}$

19) $\frac{1}{2x} = \frac{1}{8x} + 3$

20) $\frac{1}{v} + \frac{1}{v^2 - 5v} = \frac{7}{v^2 - 5v}$

21) $\frac{6}{b} = \frac{8}{b^2 - 4b} + \frac{2}{b}$

22) $1 = \frac{1}{2n} - \frac{n + 7}{2n}$

23) $\frac{6}{m^2 - 8m} = \frac{1}{m} - \frac{1}{m^2 - 8m}$

24) $\frac{1}{4a + 12} = \frac{3a - 24}{4a^2 + 20a + 24} + \frac{1}{a + 3}$

Answers to Assignment (ID: 10)

1) $\left\{\frac{7}{2}\right\}$

2) $\{4\}$

3) $\left\{-\frac{1}{5}\right\}$

4) $\left\{\frac{7}{8}\right\}$

5) $\left\{-\frac{4}{7}\right\}$

6) $\{-1\}$

7) $\left\{\frac{1}{2}\right\}$

8) $\left\{-\frac{41}{6}\right\}$

9) $\left\{\frac{21}{2}\right\}$

10) $\left\{-\frac{9}{4}\right\}$

11) $\{-2\}$

12) $\{-2\}$

13) $\left\{-\frac{8}{7}\right\}$

14) $\left\{-\frac{9}{2}\right\}$

15) $\left\{\frac{1}{3}\right\}$

16) $\left\{-\frac{13}{5}\right\}$

17) $\left\{\frac{17}{8}\right\}$

18) $\{5\}$

19) $\left\{\frac{1}{8}\right\}$

20) $\{11\}$

21) $\{6\}$

22) $\{-2\}$

23) $\{15\}$

24) $\{3\}$