Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

1) $\frac{1}{r^2} - \frac{4r-8}{r^2} = \frac{1}{r}$

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

3) $\frac{1}{3} + \frac{1}{n} = \frac{n+4}{n}$

4) $\frac{4}{5x} = \frac{2x-10}{x} - \frac{2}{5x}$

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

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

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

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

9) $\frac{1}{4k^2} - \frac{k-5}{2k^2} = \frac{1}{2k}$

10) $\frac{1}{5} = \frac{1}{5m} + \frac{3}{5}$

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

12) $\frac{3}{2n^2} = \frac{1}{6n^2} + \frac{1}{3n}$

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

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

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

16) $\frac{1}{5b} - \frac{1}{5b^2} = \frac{1}{b}$

17) $\frac{2}{r^2} = \frac{1}{r} - \frac{1}{r^2}$

18) $\frac{2v+10}{v} = \frac{1}{2} - \frac{1}{2v}$

19) $\frac{1}{2x^2} = \frac{6}{x^2} + \frac{1}{4x}$

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

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

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

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

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

# Answers to Assignment (ID: 1)

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

2) $\{2\}$

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

4) $\left\{\frac{28}{5}\right\}$

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

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

7) $\{-18\}$

8) $\{1\}$

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

10) $\left\{-\frac{1}{2}\right\}$

11) $\left\{\frac{3}{4}\right\}$

12) $\{4\}$

13) $\{8\}$

14) $\{3\}$

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

16) $\left\{-\frac{1}{4}\right\}$

17) $\{3\}$

18) $\{-7\}$

19) $\{-22\}$

20) $\{8\}$

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

22) $\{-2\}$

23) $\{-1\}$

24) $\{6\}$

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

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

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

4) $\frac{3}{5p} + \frac{p+3}{p^2} = \frac{p+4}{p^2}$

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

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

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

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

9) $\frac{1}{2} = \frac{1}{4} - \frac{1}{4a}$

10) $\frac{5}{4v^2} - \frac{3}{4v} = \frac{1}{4v}$

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

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

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

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

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

16) $\frac{3}{2r} - \frac{r-3}{2r} = \frac{1}{4r}$

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

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

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

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

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

22) $\frac{1}{6n^2} - \frac{5n+25}{3n^2} = \frac{3}{2n^2}$

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

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

# Answers to Assignment (ID: 2)

1) $\{1\}$

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

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

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

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

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

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

8) $\{-7\}$

9) $\{-1\}$

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

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

12) $\{-11\}$

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

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

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

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

17) $\{-5\}$

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

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

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

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

22) $\left\{-\frac{29}{5}\right\}$

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

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

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

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

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

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

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

6) $\frac{6a-18}{5a} + \frac{1}{a} = \frac{1}{5a}$

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

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

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

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

11) $\frac{1}{n} + \frac{4}{n^2} = \frac{n+6}{5n^2}$

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

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

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

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

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

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

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

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

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

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

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

23) $\frac{1}{2} = \frac{6n - 12}{n} - \frac{1}{6}$

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

# Answers to Assignment (ID: 3)

1) $\{-2\}$

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

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

4) $\{1\}$

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

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

7) $\{-1\}$

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

9) $\{3\}$

10) $\left\{\frac{36}{5}\right\}$

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

12) $\{7\}$

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

14) $\left\{\frac{17}{5}\right\}$

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

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

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

18) $\{11\}$

19) $\{-1\}$

20) $\{4\}$

21) $\{-1\}$

22) $\{6\}$

23) $\left\{\frac{9}{4}\right\}$

24) $\left\{\frac{9}{4}\right\}$

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

1) $\frac{r-3}{3r^2} - \frac{1}{r^2} = \frac{2}{3r^2}$

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

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

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

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

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

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

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

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

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

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

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

13) $\frac{3}{2} + \frac{1}{2} = \frac{m+6}{2m}$

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

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

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

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

18) $\frac{1}{n} = \frac{1}{6n} + \frac{1}{6}$

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

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

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

22) $\frac{v-3}{3v^2} - \frac{1}{3v} = \frac{4}{v}$

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

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

# Answers to Assignment (ID: 4)

1) $\{8\}$
2) $\{2\}$
3) $\{1\}$
4) $\{9\}$
5) $\left\{-\frac{3}{2}\right\}$
6) $\{11\}$
7) $\left\{\frac{3}{2}\right\}$
8) $\left\{\frac{1}{2}\right\}$
9) $\{3\}$
10) $\left\{-\frac{1}{3}\right\}$
11) $\{1\}$
12) $\{7\}$
13) $\{2\}$
14) $\{-7\}$
15) $\left\{-\frac{19}{4}\right\}$
16) $\left\{\frac{5}{4}\right\}$
17) $\left\{-\frac{34}{5}\right\}$
18) $\{5\}$
19) $\left\{\frac{2}{3}\right\}$
20) $\{-1\}$
21) $\{-5\}$
22) $\left\{-\frac{1}{4}\right\}$
23) $\left\{-\frac{14}{3}\right\}$
24) $\left\{\frac{1}{2}\right\}$

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

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

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

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

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

6) $\frac{4}{5r^2} + \frac{3}{r} = \frac{1}{r}$

7) $\frac{4}{n^2} = \frac{3}{n^2} - \frac{n-4}{n^2}$

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

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

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

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

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

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

14) $\frac{1}{4p} + \frac{1}{4p^2} = \frac{1}{p^2}$

15) $\frac{4}{a} = \frac{1}{2a} - \frac{3a+6}{2a}$

16) $\frac{5k+25}{2k} + \frac{1}{4k} = \frac{5}{4}$

17) $\frac{1}{n} = \frac{1}{3n} - \frac{1}{3}$

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

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

20) $\frac{5}{6r} + \frac{1}{6r} = \frac{r+3}{6r^2}$

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

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

23) $\frac{1}{b^2} = \frac{6}{5b} + \frac{5}{b^2}$

24) $\frac{3v-3}{v} = \frac{1}{v} + \frac{v-3}{v}$

# Answers to Assignment (ID: 5)

1) $\{-7\}$

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

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

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

5) $\{1\}$

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

7) $\{3\}$

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

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

10) $\{-1\}$

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

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

13) $\{-3\}$

14) $\{3\}$

15) $\left\{-\frac{13}{3}\right\}$

16) $\left\{-\frac{51}{5}\right\}$

17) $\{-2\}$

18) $\{3\}$

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

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

21) $\{-1\}$

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

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

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

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

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

3) $\frac{n+2}{n^2} - \frac{n+5}{2n^2} = \frac{3n-3}{4n^2}$

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

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

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

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

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

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

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

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

12) $\frac{5k-5}{k^2} = \frac{k-1}{k^2} + \frac{4}{3k^2}$

13) $\frac{2}{5m} + \frac{1}{5} = \frac{5}{m}$

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

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

16) $\frac{1}{3b} = \frac{2}{3} - \frac{1}{6b}$

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

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

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

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

21) $\frac{2}{5} = \frac{3x+9}{5x} + \frac{4}{5}$

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

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

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

# Answers to Assignment (ID: 6)

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

2) $\{6\}$

3) $\{1\}$

4) $\{5\}$

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

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

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

8) $\{2\}$

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

10) $\{3\}$

11) $\{3\}$

12) $\left\{\frac{4}{3}\right\}$

13) $\{23\}$

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

15) $\{4\}$

16) $\left\{\frac{3}{4}\right\}$

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

18) $\{3\}$

19) $\{-5\}$

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

21) $\left\{-\frac{9}{5}\right\}$

22) $\{5\}$

23) $\{1\}$

24) $\{-1\}$

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

2) $\frac{2}{n} + \frac{4n+24}{3n} = \frac{5}{3}$

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

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

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

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

7) $\frac{1}{a} - \frac{a-4}{5a} = \frac{a+6}{a}$

8) $\frac{v-3}{v} + \frac{5}{2v} = \frac{6v-18}{v}$

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

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

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

12) $\frac{1}{6n^2} - \frac{2n+10}{3n^2} = \frac{1}{2n^2}$

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

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

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

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

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

18) $\frac{n+6}{2n^2} - \frac{3n-15}{2n^2} = \frac{1}{6n}$

19) $\frac{r-4}{5r^2} - \frac{6}{5r^2} = \frac{4}{r^2}$

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

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

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

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

24) $\frac{1}{3x^2} + \frac{1}{3x} = \frac{2x + 10}{3x^2}$

# Answers to Assignment (ID: 7)

1) $\{-4\}$

2) $\{30\}$

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

4) $\{9\}$

5) $\{3\}$

6) $\{-1\}$

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

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

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

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

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

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

13) $\{4\}$

14) $\{-6\}$

15) $\{8\}$

16) $\{-8\}$

17) $\{2\}$

18) $\{9\}$

19) $\{30\}$

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

21) $\left\{-\frac{1}{2}\right\}$

22) $\left\{-\frac{13}{2}\right\}$

23) $\{1\}$

24) $\{-9\}$

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

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

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

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

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

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

7) $\frac{1}{k} = \frac{2}{k} - \frac{k-4}{3k}$

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

9) $\frac{6}{n} = \frac{1}{n} + \frac{2}{n^2}$

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

11) $\frac{1}{3r^2} = \frac{1}{r^2} - \frac{1}{3r}$

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

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

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

15) $\frac{1}{n} + \frac{6}{n^2} = \frac{1}{5n^2}$

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

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

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

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

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

21) $\frac{2}{r^2} + \frac{r-1}{r^2} = \frac{1}{3r}$

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

23) $\frac{p+4}{p^2} + \frac{1}{2p^2} = \frac{3p-12}{p^2}$

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

# Answers to Assignment (ID: 8)

1) $\{-1\}$

2) $\{1\}$

3) $\{2\}$

4) $\left\{-\frac{1}{6}\right\}$

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

6) $\{3\}$

7) $\{7\}$

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

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

10) $\{8\}$

11) $\{2\}$

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

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

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

15) $\left\{-\frac{29}{5}\right\}$

16) $\{12\}$

17) $\{1\}$

18) $\{4\}$

19) $\{-3\}$

20) $\{-4\}$

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

22) $\{3\}$

23) $\left\{\frac{33}{4}\right\}$

24) $\{-5\}$

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

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

3) $\frac{5n+15}{n} - \frac{1}{5n} = \frac{3n-3}{5n}$

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

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

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

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

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

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

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

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

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

13) $\frac{1}{r^2} = \frac{5}{r^2} + \frac{1}{r}$

14) $\frac{v-2}{2v^2} + \frac{v-3}{v^2} = \frac{v-3}{2v^2}$

15) $\frac{1}{b^2} = \frac{3b+15}{2b^2} + \frac{3}{2b^2}$

16) $\frac{1}{x} + \frac{3x+6}{x^2} = \frac{x+5}{x^2}$

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

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

19) $\frac{1}{2} - \frac{3}{2} = \frac{k+6}{4k}$

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

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

22) $\frac{n-5}{3n} + \frac{1}{3} = \frac{2n-8}{n}$

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

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

# Answers to Assignment (ID: 9)

1) $\{3\}$

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

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

4) $\{5\}$

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

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

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

8) $\{15\}$

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

10) $\left\{-\frac{1}{6}\right\}$

11) $\{-3\}$

12) $\{2\}$

13) $\{-4\}$

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

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

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

17) $\{-2\}$

18) $\{-3\}$

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

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

21) $\{-1\}$

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

23) $\{3\}$

24) $\{2\}$

ID: 10

Name_____

# Assignment

Date_____ Period____

**Solve each equation. Remember to check for extraneous solutions.**

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

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

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

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

5) $\frac{1}{b^2} + \frac{5}{b} = \frac{6}{b^2}$

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

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

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

9) $\frac{1}{x} = \frac{1}{3} - \frac{1}{6x}$

10) $\frac{1}{v^2} = \frac{1}{3v^2} + \frac{2}{3v}$

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

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

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

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

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

16) $\frac{5}{p^2} = \frac{2}{p^2} - \frac{p - 1}{5p^2}$

17) $\frac{1}{m} = \frac{1}{m^2} + \frac{2m + 10}{m^2}$

18) $\frac{3}{x^2} - \frac{5x - 15}{x^2} = \frac{1}{x}$

19) $\frac{1}{4n^2} - \frac{5n + 25}{4n^2} = \frac{1}{4n}$

20) $\frac{2}{5b^2} - \frac{1}{b} = \frac{1}{5b^2}$

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

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

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

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

# Answers to Assignment (ID: 10)

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

2) $\{-1\}$

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

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

5) $\{1\}$

6) $\{2\}$

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

8) $\left\{\frac{15}{4}\right\}$

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

10) $\{1\}$

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

12) $\{2\}$

13) $\left\{\frac{31}{3}\right\}$

14) $\left\{\frac{13}{6}\right\}$

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

16) $\{-14\}$

17) $\{-11\}$

18) $\{3\}$

19) $\{-4\}$

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

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

22) $\{-5\}$

23) $\{-9\}$

24) $\{1\}$