Solving Linear Equations: Fractional Coefficients

Solve each equation.

1) $m + 4 = \frac{13}{2}$

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

3) $\frac{4}{5} + v = \frac{41}{20}$

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

5) $-\frac{11}{3} = v - \frac{1}{2}$

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

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

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

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

10) $-\frac{9}{4} = -\frac{5}{4}x$

11) $\frac{4}{11}n = -\frac{16}{55}$

12) $\frac{5v}{13} = \frac{25}{39}$

13) $\frac{73}{18} = -\frac{2}{3}n + 1\frac{1}{2}$

14) $\frac{2}{3} + 2r = -\frac{86}{15}$

15) $\frac{5}{3}r + \frac{4}{3} = -\frac{8}{9}$

16) $\frac{3}{2}p - 2 = -\frac{7}{8}$

17) $\frac{3}{2}a - \frac{4}{3}a = -\frac{10}{3} + 2\frac{2}{3}a$

18) $-x + \frac{1}{2}x = \frac{67}{12} + x + \frac{5}{3} - 2$

19) $\frac{29}{18} + \frac{1}{2}x = -\frac{5}{3}\left(x + \frac{1}{3}\right)$

20) $\frac{7}{3}\left(\frac{1}{2}v - \frac{10}{3}\right) = -\frac{35}{3} - \frac{1}{2}v$

Answers to Solving Linear Equations: Fractional Coefficients

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

2) $\{4\}$

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

4) $\{-1\}$

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

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

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

8) $\{1\}$

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

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

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

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

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

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

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

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

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

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

19) $\{-1\}$

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