Precalc
Practice solving equations with fractions

Solve each equation.

1) $-\dfrac{7}{8}n - \dfrac{443}{96} = \dfrac{7}{6}n + 1$

2) $n - \dfrac{7}{6} = -\dfrac{409}{96} + \dfrac{15}{4}n$

3) $\dfrac{17}{4}p + \dfrac{5}{3}p = \dfrac{115}{24} + p + \dfrac{5}{3} - 4$

4) $\dfrac{201}{98} + \dfrac{3}{7}x = \dfrac{1}{2}x + \dfrac{15}{7}$

5) $-\dfrac{1867}{168} - \dfrac{2}{7}x + \dfrac{27}{7}x = \dfrac{5}{4}x - \dfrac{2}{3}$

6) $-\dfrac{38}{3} - 2x + \dfrac{13}{8}x = 4x - \dfrac{8}{3}$

7) $\dfrac{17}{6}n + 2n = \dfrac{31}{6} + \dfrac{8}{7}n$

8) $\dfrac{9}{2}n - \dfrac{739}{96} = -\dfrac{7}{4}n - \dfrac{2}{3}$

9) $\dfrac{153}{40} + \dfrac{19}{5}a - \dfrac{2}{5}a = \dfrac{19}{4}a + \dfrac{9}{4}$

10) $n + \dfrac{13}{3} = \dfrac{27}{2} - \dfrac{2}{3}n$

11) $\dfrac{9}{2}a + \dfrac{3}{4} = \dfrac{75}{16} + \dfrac{11}{4}a - \dfrac{1}{2}a$

12) $-\dfrac{8}{5}n - \dfrac{87}{10} = -\dfrac{2}{3}n - \dfrac{7}{6} + \dfrac{17}{6}n$

13) $p + \dfrac{7}{6} = -\dfrac{23}{6}p + \dfrac{499}{30}$

14) $-\dfrac{103}{48} + \dfrac{7}{6}r - \dfrac{11}{6} + 1 = \dfrac{3}{4}r + \dfrac{1}{4}$

15) $\dfrac{4}{3}x + \dfrac{9}{4}x + \dfrac{7649}{1680} = \dfrac{4}{7}x + \dfrac{19}{5}$

16) $\dfrac{8}{5}n - \dfrac{19}{8}n = \dfrac{7}{5}n + 2n - \dfrac{167}{35}$

Answers to Practice solving equations with fractions

1) $\left\{-\dfrac{11}{4}\right\}$

2) $\left\{\dfrac{9}{8}\right\}$

3) $\left\{\dfrac{1}{2}\right\}$

4) $\left\{-\dfrac{9}{7}\right\}$

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

6) $\left\{-\dfrac{16}{7}\right\}$

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

8) $\left\{\dfrac{9}{8}\right\}$

9) $\left\{\dfrac{7}{6}\right\}$

10) $\left\{\dfrac{11}{2}\right\}$

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

12) $\{-2\}$

13) $\left\{\dfrac{16}{5}\right\}$

14) $\left\{\dfrac{31}{4}\right\}$

15) $\left\{-\dfrac{1}{4}\right\}$

16) $\left\{\dfrac{8}{7}\right\}$