Review

14-04-15-T8

Solve each equation.

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

2) $-\frac{8}{3} - 2\left(\frac{1}{2}x + \frac{1}{2}\right) = -\frac{1}{3} + \frac{7}{3}\left(x - \frac{4}{3}\right)$

3) $-\left(2k + \frac{1}{2}\right) = 2\left(-\frac{7}{2}k - \frac{5}{2}\right)$

4) $\frac{1}{2}\left(n + \frac{1}{3}\right) = 2\left(n + \frac{1}{2}\right)$

5) $-\frac{3}{2} - \frac{7}{3}\left(\frac{5}{3}v + \frac{1}{3}\right) = -\frac{5}{2}\left(\frac{2}{3}v + 1\right)$

6) $\frac{2}{3}\left(-\frac{3}{2}x - \frac{3}{2}\right) = -\frac{4}{3}\left(\frac{1}{2}x + 1\right) + \frac{3}{2}x$

7) $\frac{2}{3}\left(-\frac{3}{2}r - 1\right) + \frac{1}{3}\left(r - \frac{8}{3}\right) = -\frac{3}{2}r - \frac{3}{2}r$

8) $-\frac{2}{3}\left(x - \frac{7}{2}\right) = -\frac{1}{2}\left(\frac{1}{3}x + \frac{1}{2}\right) + \frac{3}{2}x$

9) $-2r - \frac{5}{2}\left(-\frac{10}{3}r - \frac{5}{2}\right) = -2\left(\frac{2}{3}r + \frac{5}{3}\right)$

10) $\frac{2}{3}\left(-\frac{5}{2}m - \frac{1}{3}\right) = -\left(\frac{7}{3}m - \frac{2}{3}\right)$

11) $\frac{1}{2}\left(\frac{3}{2}n + 1\right) - \frac{5}{2}n = \frac{3}{2}\left(-\frac{1}{2}n - \frac{3}{2}\right)$

12) $-\left(\frac{1}{2}k - \frac{11}{3}\right) = -2\left(k + \frac{1}{2}\right) - 1$

13) $\frac{1}{2}\left(p - \frac{4}{3}\right) = -\frac{5}{3} + \frac{5}{2}\left(\frac{3}{2}p - 2\right)$

14) $-2n - 2\left(\frac{5}{2}n + 1\right) = -2n - \frac{1}{3}\left(\frac{1}{2}n - \frac{3}{2}\right)$

15) $-\frac{5}{2}a - 2\left(a - \frac{5}{2}\right) = \frac{1}{2}\left(a + \frac{7}{3}\right)$

16) $-\frac{3}{2}\left(-\frac{5}{2}x + 2\right) - \frac{5}{3}\left(\frac{1}{2}x - \frac{1}{2}\right) = -\frac{10}{3}x - \frac{5}{2}x$

17) $-\frac{1}{2}\left(x - \frac{1}{3}\right) = -\frac{1}{2}\left(-\frac{5}{2}x - 2\right)$

18) $-2\left(-\frac{5}{2}k + 2\right) - \frac{3}{2}k = -\left(\frac{4}{3}k - \frac{3}{2}\right)$

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

20) $-\frac{4}{3} + \frac{5}{3}\left(\frac{1}{2}v - \frac{5}{2}\right) = \frac{5}{3}v - \frac{4}{3}\left(v - \frac{1}{3}\right)$

Answers to 14-04-15-T8

1) $\{37\}$

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

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

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

5) $\left\{\frac{1}{10}\right\}$

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

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

8) $\left\{\frac{31}{24}\right\}$

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

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

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

12) $\left\{-\frac{34}{9}\right\}$

13) $\left\{\frac{24}{13}\right\}$

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

15) $\left\{\frac{23}{30}\right\}$

16) $\left\{\frac{26}{105}\right\}$

17) $\left\{-\frac{10}{21}\right\}$

18) $\left\{\frac{33}{29}\right\}$

19) $\{0\}$

20) $\left\{\frac{107}{9}\right\}$