14-04-17-T7

Solve each equation.

1) $x+\frac{8}{3}\left(-\frac{5}{3}x+1\right)=\frac{2}{3}+\frac{5}{3}\left(\frac{4}{3}x+1\right)$

2) $\frac{7}{2}\left(n-\frac{4}{3}\right)=2\left(\frac{3}{2}n-\frac{1}{2}\right)-\frac{5}{3}n$

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

4) $-\frac{10}{3}\left(\frac{1}{2}v+1\right)=-2\left(\frac{1}{3}v-\frac{2}{3}\right)$

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

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

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

8) $2\left(m+\frac{5}{3}\right)+\frac{7}{3}m=-2\left(2m-\frac{4}{3}\right)$

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

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

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

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

13) $-2p+\frac{3}{2}+\frac{3}{2}p-\frac{11}{3}=\frac{4}{3}\left(-\frac{4}{3}p-2\right)+\frac{3}{2}\left(p+\frac{1}{3}\right)$

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

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

16) $-2\left(-\frac{8}{3}n+1\right)=\frac{5}{2}\left(\frac{1}{2}n+2\right)$

17) $\frac{5}{2}x-\frac{10}{3}\left(\frac{3}{2}x+\frac{3}{2}\right)=-\frac{3}{2}\left(\frac{8}{3}x+2\right)$

18) $2\left(\frac{5}{2}b+1\right)-\frac{11}{3}b=-2\left(\frac{1}{2}b-\frac{11}{3}\right)$

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

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

Answers to 14-04-17-T7

1) $\left\{\frac{1}{17}\right\}$

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

3) $\left\{-\frac{23}{19}\right\}$

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

5) $\left\{-\frac{1}{13}\right\}$

6) $\left\{-\frac{17}{12}\right\}$

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

8) $\left\{-\frac{2}{25}\right\}$

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

10) $\left\{-\frac{15}{26}\right\}$

11) $\{0\}$

12) $\left\{-\frac{19}{8}\right\}$

13) $\{0\}$

14) $\left\{\frac{38}{45}\right\}$

15) $\left\{\frac{9}{19}\right\}$

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

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

18) $\left\{\frac{16}{7}\right\}$

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

20) $\left\{\frac{17}{24}\right\}$