

Resolver las siguientes ecuaciones de primer grado

1.  $\frac{x}{5} + 1 = 7$

2.  $\frac{3x}{5} + 10 = x$

3.  $\frac{x}{3} - \frac{7}{2} = \frac{5}{2}$

4.  $\frac{2x}{3} - \frac{x}{2} = \frac{x}{6}$

5.  $\frac{5}{3} = \frac{x-5}{2}$

6.  $\frac{2x-5}{5} = \frac{1+2x}{2}$

7.  $\frac{x-5}{2} = \frac{8-x}{4}$

8.  $\frac{x}{2} + \frac{x}{5} - \frac{3x}{7} = 38$

9.  $\frac{2x}{5} - x = 12 - 3x$

10.  $\frac{2x-7}{3} + 3 = 1 - x$

11.  $\frac{x}{2} + x - 21 = \frac{x}{4} + \frac{x}{5}$

12.  $\frac{x}{2} - \frac{3x}{4} = 5 - \frac{2x}{3}$

13.  $-\frac{4}{7}x = 4 - x$

14.  $\frac{x}{3} + 1 = \frac{1}{3} - \frac{x}{6}$

15.  $\frac{2}{3} + \frac{x}{2} - \frac{3x}{4} = \frac{1}{2}$

16.  $\frac{-11}{6} - \frac{x-5}{9} = 4x - 2$

17.  $\frac{2x-4}{3} + \frac{3x+6}{2} = x - 2$

18.  $\frac{7-5x}{3} = \frac{13-3x}{2} - 11$

19.  $\frac{x}{12} - \frac{x+16}{10} = 22 - x$

20.  $\frac{x}{2} + \frac{x}{3} - \frac{3}{4} + \frac{x-4}{4} = 13$

21.  $\frac{x+5}{8} - \frac{x-1}{10} = -\frac{x+1}{12}$

22.  $\frac{x-4}{3} - \frac{5x-1}{2} = \frac{2x+1}{6}$

23.  $\frac{2x-4}{3} - \frac{3x+6}{2} = x - 2$

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

25.  $\frac{2(x-3)}{3} - \frac{6(2-x)}{5} = 0$

26.  $\frac{2(3-x)}{3} - \frac{4(x-2)}{5} = 8$

27.  $\frac{2(x+3)}{9} - \frac{4x-9}{15} = 1$

28.  $2(x-7) - \frac{x+3}{4} = x - 5$

29.  $\frac{3(-1)}{2} - \frac{5(3-x)}{4} = 2x$

30.  $\frac{2(x-2)}{3} - x + 2 = \frac{3(-2)}{5}$

31.  $\frac{1}{3} - \frac{4(-5)}{3} - \frac{3x}{4} = \frac{1}{2} - \frac{2(x+3)}{3}$

32.  $\frac{1}{5} - 2\left(\frac{x}{7} - \frac{1}{5}\right) = 3x$

33.  $3\left(\frac{x}{2} - 5\right) = \frac{3}{2}(3x - 2)$

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

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

36.  $5\left(\frac{1}{2} - \frac{3}{4}\right) = 9\left(5 - \frac{2x}{3}\right)$

37.  $3\left(\frac{5x}{3} + 1\right) = 2\left(\frac{1}{3} - \frac{x}{5}\right)$

38.  $\frac{5x}{3} - 3\left(\frac{x}{4} + \frac{4}{5}\right) = 3\left(\frac{1}{5} - \frac{2x}{3}\right) - 38$

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

## Soluciones

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1.  $x = 30$

2.  $x = 25$

3.  $x = 18$

4. Es una identidad

5.  $x = 5$

6.  $x = -\frac{5}{2}$

7.  $x = 6$

8.  $x = 140$

9.  $x = 5$

10.  $x = \frac{1}{5}$

11.  $x = 20$

12.  $x = 12$

13.  $x = 7$

14.  $x = -\frac{4}{11}$

15.  $x = \frac{2}{3}$

16.  $x = \frac{13}{71}$

17.  $x = -\frac{22}{7}$

18.  $x = 41$

19.  $x = 24$

20.  $x = \frac{180}{13}$

21.  $x = -\frac{97}{13}$

22.  $x = -\frac{2}{5}$

23.  $x = -\frac{14}{11}$

24.  $x = -\frac{4}{3}$

25.  $x = \frac{33}{14}$

26.  $x = -3$

27.  $x = 6$

28.  $x = 13$

29.  $x = 7$

30.  $x = -7$

31.  $x = 6$

32.  $x = \frac{7}{54}$

33.  $x = -4$

34.  $x = \frac{4}{11}$

35.  $x = -2$

36.  $x = \frac{195}{34}$

37.  $x = -\frac{35}{81}$

38.  $x = -12$

39.  $x = 38$