

Solving Linear Equations

Solve the equations and leave your answers as simplified fractions or as decimals.

Section A

1) $\frac{2x+5}{3} = 11$

5) $8x + \frac{1-4x}{8} = 7$

9) $2 + \frac{4x}{3} - 7 = 1$

2) $\frac{8-3x}{2} = 5$

6) $\frac{5}{x} = -6$

10) $4 - \frac{3x}{2} = 3x + 5$

3) $\frac{5-9x}{6} = -2$

7) $\frac{11}{4x} + 9 = 3$

11) $6 - \frac{2}{x} = 10$

4) $\frac{7x+6}{3} - 9 = -12$

8) $5 - \frac{3x}{4} = 8x$

12) $4 - \frac{2x}{9} + x = -1$

Section B

1) $4(2x-3) = 8(2x+5)$

7) $7(4-3x) = 2(8x-9) + 6$

2) $3(4x-5) = 5(2x-5)$

8) $-6(3-4x) + 2x = 8(x+11)$

3) $8(6x+2) = 5(x-2)$

9) $3(2x-6) = 3-4(3-x)$

4) $2(3x-4) = 7(11-2x)$

10) $9(2x-1) - 3x = 3(12+x)$

5) $7(5-x) = -4(x-11)$

11) $4x - (2x-8) = 5(1+2x)$

6) $-4(x-8) = -6(4+3x)$

12) $10 - 6(8x-2) = 9x - (3+4x)$

Section C

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

8) $\frac{1}{2}(5x+7) = \frac{3}{4}(3x-1)$

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

9) $\frac{5}{3x+1} = 12$

3) $\frac{-8x-1}{2} = \frac{5-3x}{6}$

10) $\frac{x+2}{x+3} = 4$

4) $\frac{5(x+11)}{3} = \frac{3(1+x)}{2}$

11) $\frac{2x-9}{3x-2} = -3$

5) $\frac{3(2+5x)}{4} = \frac{2(6x-3)}{5}$

12) $\frac{2}{3x+10} = \frac{1}{x-1}$

6) $\frac{2(3x-5)}{3} = \frac{-4(x-2)}{7}$

13) $\frac{2}{7x+3} = \frac{9}{2x-5}$

7) $\frac{1}{2}(2x-6) = \frac{1}{4}(8-12x)$

14) $\frac{8}{6x+12} = -\frac{11}{7x-10}$