



## 2.3 – Linear equations

Student name: \_\_\_\_\_ Score: \_\_\_\_\_

1. Solve the equation  $17 - 2x = 4x - 7$ .

$x = \dots$  <sup>4</sup> ..... [2]

2. Solve the equation.

$$\frac{x+3}{7} - \frac{3(x-1)}{14} = 1$$

$x = \dots$  <sup>-5</sup> ..... [3]

3. Solve the equations.

$$2 - 3(1 - 2x) = 4(2 - x)$$

$x = \dots$  <sup>0.9</sup> ..... [3]

4. Find  $n$  when  $\frac{5}{6} = \frac{n}{24}$ .

$n = \dots$  <sup>20</sup> ..... [1]

5. Solve.

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

$x = \dots$  <sup>14</sup> ..... [3]

6. Solve the following equation.

$$\frac{2x+1}{3} + \frac{x+1}{2} = 9$$

$x = \dots$  <sup>7</sup> ..... [3]

7. Solve these equations.

(a)  $\frac{x}{5} + 7 = 3$

$x = \dots$  <sup>-20</sup> ..... [2]

(b)  $7(x+3) - 2(x+4) = 10$

$x = \dots$  <sup>-0.6</sup> ..... [3]

8. Solve.

$$2x - 3(1 - 4x) = 2(11 - 3x)$$

$x = \dots$  <sup>1.25</sup> ..... [3]

9. Solve.

$$7x + 9 = 5x + 17$$

$x = \dots$  <sup>4</sup> ..... [2]

10. Solve.

$$2 - 4(5 - 2x) = 0$$

$$x = \underline{2.25} \quad [2]$$

11. Solve.

(a)  $4x = 28$

$$x = \underline{7} \quad [1]$$

(b)  $3(a - 6) = 24$

$$a = \underline{14} \quad [2]$$

12. Solve the equation.

$$x - 11 = -4$$

$$x = \underline{7} \quad [1]$$

13. Solve the equation.

$$45 - \frac{90}{x} = 15$$

$$x = \underline{3} \quad [3]$$

14. Solve.

$$6x - 5 = 19$$

$$x = \underline{4} \quad [2]$$

15. Solve.

$$6 - 2t = -12$$

$$t = \underline{9} \quad [2]$$

16. Solve.

$$-3(1 - 4x) = 9$$

$$x = \underline{1} \quad [3]$$

17. Solve the equation.

$$2x - 7 = -3$$

$$x = \underline{2} \quad [2]$$

18. Solve.

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

$$x = \underline{2.5 \text{ or } \frac{5}{2} \text{ or } 2\frac{1}{2}} \quad [3]$$



19. Solve.

$$\frac{8-x}{3} = \frac{x+1}{2}$$

$$x = \textcolor{red}{2.6} \dots\dots\dots [3]$$

20. Solve.

(a)  $5 - 2x = 0$

$$x = \textcolor{red}{2.5} \dots\dots\dots [1]$$

(b)  $-12 + 2x = 5x - 3$

$$x = \textcolor{red}{-3} \dots\dots\dots [2]$$

21. Solve the equation.

$$2q - 7 = 2 - 7q$$

$$q = \textcolor{red}{1} \dots\dots\dots [2]$$