Equations with Unknowns on Both Sides

SCAN ME

REVISE THIS TOPIC

1 Solve $6x + 10 = 2x + 18$

$-2x$ ($6x + 10 = 2x + 18$) $-2x$

-10 ($4x + 10 = 18$) -10

$\div 4$ ($4x = 8$) $\div 4$

$x = 2$

$x =$ 2

(Total for Question 1 is 3 marks)

2 Solve $5y + 5 = 2y + 20$

$-2y$ ($5y + 5 = 2y + 20$) $-2y$

-5 ($3y + 5 = 20$) -5

$\div 3$ ($3y = 15$) $\div 3$

$y = 5$

$y =$ 5

(Total for Question 2 is 3 marks)

3 Solve $7w - 1 = 4w + 20$

$-4w$ ($7w - 1 = 4w + 20$) $-4w$

$+1$ ($3w - 1 = 20$) $+1$

$\div 3$ ($3w = 21$) $\div 3$

$w = 7$

$w =$ 7

(Total for Question 3 is 3 marks)

4 Solve $9a - 4 = 5a + 32$

$-5a$ ($9a - 4 = 5a + 32$) $-5a$

$+4$ ($4a - 4 = 32$) $+4$

$4a = 36$

$a =$ 9

(Total for Question 4 is 3 marks)

5 Solve $4b - 3 = 3b + 27$

$-3b$ ($4b - 3 = 3b + 27$) $-3b$

$+3$ ($b - 3 = 27$) $+3$

$b = 30$

$b =$ 30

(Total for Question 5 is 3 marks)

6 Solve $10c + 1 = 3c + 8$

$-3c$ ($10c + 1 = 3c + 8$) $-3c$

-1 ($7c + 1 = 8$) -1

$7c = 7$

$c =$ 1

(Total for Question 6 is 3 marks)

7 Solve $5d + 15 = 2d + 9$

$-2d$ ($5d + 15 = 2d + 9$) $-2d$

-15 ($3d + 15 = 9$) -15

$3d = -6$

$d =$ -2

(Total for Question 7 is 3 marks)

8 Solve $5g + 17 = 3g + 7$

$-3g$ ($5g + 17 = 3g + 7$) $-3g$

-17 ($2g + 17 = 7$) -17

$2g = -10$

$g =$ -5

(Total for Question 8 is 3 marks)

9 Solve $6h - 18 = 3h - 3$

$-3h$ ($6h - 18 = 3h - 3$) $-3h$

$+18$ ($3h - 18 = -3$) $+18$

$3h = 15$

$h =$ 5

(Total for Question 9 is 3 marks)

10 Solve $5p - 34 = 2p - 4$

$-2p$ ($5p - 34 = 2p - 4$) $-2p$

$+34$ ($3p - 34 = -4$) $+34$

$3p = 30$

$p =$ 10

(Total for Question 10 is 3 marks)

11 Solve $5k + 20 = 8k - 7$

$-5k$ ($8k - 7 = 5k + 20$) $-5k$

$+7$ ($3k - 7 = 20$) $+7$

$3k = 27$

$k =$ 9

(Total for Question 11 is 3 marks)

12 Solve $3r + 30 = 7r + 6$

$-3r$ ($7r + 6 = 3r + 30$) $-3r$

-6 ($4r + 6 = 30$) -6

$4r = 24$

$r =$ 6

(Total for Question 12 is 3 marks)

13 Solve $2m – 30 = 9m – 2$

$-2m$ ($9m - 2 = 2m - 30$) $-2m$

$+2$ ($7m - 2 = -30$) $+2$

$7m = -28$

$m =$ -4

(Total for Question 13 is 3 marks)

14 Solve $3n + 4 = 24 – 2n$

$+2n$ ($3n + 4 = 24 - 2n$) $+2n$

-4 ($5n + 4 = 24$) -4

$5n = 20$

$n =$ 4

(Total for Question 14 is 3 marks)

15 Solve $4t – 8 = 40 – 4t$

$+4t$ ($4t - 8 = 40 - 4t$) $+4t$

$+8$ ($8t - 8 = 40$) $+8$

$8t = 48$

$t =$ 6

(Total for Question 15 is 3 marks)

16 Solve $x + 7 = 5x - 3$

$-x$ ($5x - 3 = x + 7$) $-x$

$+3$ ($4x - 3 = 7$) $+3$

$4x = 10$

$x =$ 2.5

(Total for Question 16 is 3 marks)

17 Solve $4(y + 3) = 2(y + 10)$

$-2y$ ($4y + 12 = 2y + 20$) $-2y$

-12 ($2y + 12 = 20$) -12

$2y = 8$

$y =$ 4

(Total for Question 17 is 3 marks)

18 Solve $5(a - 5) = 2(a + 1)$

$-2a$ ($5a - 25 = 2a + 2$) $-2a$

$+25$ ($3a - 25 = 2$) $+25$

$3a = 27$

$a =$ 9

(Total for Question 18 is 3 marks)

19 Solve $2(b + 5) = 7(b + 10)$

$-2b$ ($7b + 70 = 2b + 10$) $-2b$

-70 ($5b + 70 = 10$) -70

$5b = -60$

$b =$ -12

(Total for Question 19 is 3 marks)