

KS3 – Equations – Answers

Section A – One-Step Equations

Q1

a) $x = 8$

b) $y = 8$

c) $a = 14$

d) $p = 17$

Q2

a) $x = 7$

b) $y = 7$

c) $a = 7$

d) $p = 8$

Q3

a) $x = 35$

b) $y = 36$

c) $a = 48$

d) $p = 33$

Q4

a) $x = 5$

b) $y = -10$

c) $a = -6$

Q5

$7n = 91$

$n = 13$

Section B – Two-Step Equations

Q6

a) $x = 6$

b) $y = 7$

c) $a = 7$

Q7

a) $x = 6$

b) $y = 6$

c) $a = 5$

Q8

a) $x = 15$

b) $y = 30$

c) $a = 12$

Q9

a) $x = 7$

b) $y = 5$

c) $a = -3$

Q10

a) $x = -4$

b) $y = -4$

c) $a = -6$

Q11

$$2x + 2(x + 5) = 34$$

$$x = 6$$

Section C – Multi-Step Equations

Q12

a) $x = 6$

b) $y = 6$

c) $a = 7$

Q13

a) $x = 7$

b) $y = 5$

c) $a = 7$

Q14

a) $x = 4$

b) $y = 8$

c) $a = 4$

Q15

a) $x = 3$

b) $y = 5$

c) $a = 5$

Q16

a) $x = -8$

b) $y = -4$

c) $a = -5$

Q17

Let the integers be x , $x + 1$ and $x + 2$.

$$x + (x + 1) + (x + 2) = 72$$

Integers: 23, 24 and 25

Q18

$$2(2x + 3) + 2(x - 1) = 40$$

$$x = 6$$