KS3 – Ratio – Answers

Section A – Simplifying Ratios

Q1
a) 2 : 3
b) 3 : 5
c) 3 : 5
d) 2 : 3

Q2
a) 5 : 7
b) 2 : 3
c) 3 : 4
d) 3 : 5

Q3
a) 2 : 3 : 4
b) 2 : 3 : 5
c) 3 : 4 : 5
d) 3 : 5 : 7

Q4
a) 1 : 4
b) 1 : 4
c) 3 : 8

Q5
a) x = 20
b) x = 35
c) x = 33

Section B – Sharing in a Ratio

Q6
a) £6 and £18
b) £10 and £25
c) 30 and 18 sweets

Q7
a) £30 and £42
b) 40 kg and 50 kg
c) 84 and 48 points

Q8
a) £10, £20, £30
b) 24, 36, 48 counters
c) £48, £60, £72

Q9
a) £48
b) 40 red beads
c) £60 more

Q10
Total parts = 15.
One part = £16.
Shares: £48, £80 and £112.

Section C – Ratio Problem Solving

Q11
a) 30 girls
b) 8 litres
c) 140 g

Q12
a) 28 dogs
b) 36 children
c) 21 blue counters

Q13
a) 2 : 3
b) 3 : 2 : 5
c) 8 : 3

Q14
a) Sam £60, Leo £36
b) 66 people
c) 98 counters

Q15
a) 55 pieces of fruit
b) 40 Year 8 students
c) 72 50p coins

Q16
Difference = 2 parts = 64, so 1 part = 32.
Total = 16 parts = 512 students.

Q17
Let the original amounts be 2k and 5k litres.
2k : (5k + 6) = 1 : 4
8k = 5k + 6, so k = 2.
Concentrate = 2k = 4 litres.