



Multi-Part Ratios - set samples - paper 1

For each question, use the given ratio to answer parts (a), (b) and (c).

Show your working clearly.

1. Three departments share a company budget: Marketing, Engineering and Sales. For every £4 that Marketing receives, Engineering receives £7 and Sales receives £1.

(a) The total budget is £96. How much does Sales receive?

ans _____

(b) Together, Sales and Marketing receive £10. How much does Engineering receive?

ans _____

(c) The total budget is £48. How much more does Engineering receive than Sales?

ans _____

2. A fruit punch recipe says that for every 3 parts of syrup, you need 6 parts of juice and 5 parts of sparkling water.

(a) If I use 15 litres of sparkling water, how many litres of syrup do I need?

ans _____

(b) The recipe uses 36 more litres of juice than syrup. How many litres of sparkling water are needed?

ans _____

(c) I want to make 28 litres of punch in total. How many litres of sparkling water should I use?

ans _____

3. A gaming team follows a specific composition strategy. For every 2 healers in the team, they have 5 tanks and 3 damage dealers.

(a) A raid group has 50 players in total. How many tanks are needed?

ans _____

(b) A raid group has 90 players in total. How many more damage dealers are there than healers?

ans _____

(c) There are 7 more damage dealers than healers. How many tanks are needed?

ans _____



Multi-Part Ratios - set samples - Answers

1. (a) $4 + 7 + 1 = 12$
 $96 \div 12 = 8$
 $8 \times 1 = 8$
Answer: 8

(b) $1 + 4 = 5$
 $10 \div 5 = 2$
 $2 \times 7 = 14$
Answer: 14

(c) $4 + 7 + 1 = 12$
 $48 \div 12 = 4$
 $7 - 1 = 6$
 $4 \times 6 = 24$
Answer: 24

2. (a) $15 \div 5 = 3$
 $3 \times 3 = 9$
Answer: 9

(b) $6 - 3 = 3$
 $36 \div 3 = 12$
 $12 \times 5 = 60$
Answer: 60

(c) $3 + 6 + 5 = 14$
 $28 \div 14 = 2$
 $2 \times 5 = 10$
Answer: 10

3. (a) $2 + 5 + 3 = 10$
 $50 \div 10 = 5$
 $5 \times 5 = 25$
Answer: 25

(b) $2 + 5 + 3 = 10$
 $90 \div 10 = 9$
 $3 - 2 = 1$
 $9 \times 1 = 9$
Answer: 9

(c) $3 - 2 = 1$
 $7 \div 1 = 7$
 $7 \times 5 = 35$
Answer: 35