Test - Ratio, proportion and percentages

Year: Year 6 · Duration: 40 minutes · /20

Name:	Date:	**Mark: /20**

Question	1	2	3	4	5	Total
marks	3	4	4	4	5	**20**
Mark						

Show your working.

Question 1 (3 marks)

Question 1 – Simplifying ratios

a. Write 24 : 40 in its simplest form.
b. A bag has 9 red and 15 yellow sweets. Write the ratio of red to yellow sweets in its simplest form.
c. Write 2 m : 50 cm as a ratio in its simplest form.

Question 2 (4 marks)

Question 2 – Sharing in a ratio

a. Share £84 in the ratio 5 : 7.
b. Share 90 sweets in the ratio 1 : 2 : 3.
c. Two sisters share £36 in the ratio 4 : 5. How much more does the older sister get than the younger sister?

Question 3 (4 marks)

Question 3 – Scale and proportion

a. 4 notebooks cost £5.20. How much do 10 notebooks cost?
b. On a map, 1 cm shows 2 km. A path is 7.5 cm on the map. How long is the real path?
c. A rectangle 4 cm by 7 cm is enlarged with a scale factor of 3. Find the new length and width.
d. The real width of a lake is 15 km. How wide is it on the map in part (b)?

Question 4 (4 marks)

Question 4 – Percentages

a. Find 30% of £250.

b. Increase 60 kg by 15%.
c. In a test Ali scored 34 out of 40 and Bea scored 42 out of 50. Who got the higher percentage? Show your working.

Question 5 (5 marks)

Question 5 – The party punch

Mia makes fruit punch for a party. She mixes orange juice, apple juice and lemonade in the ratio 3 : 2 : 5. She needs 4 litres of punch altogether.

a. How many parts are there in the ratio?
b. How much of each drink does she need? Give the answers in litres.
c. What percentage of the punch is lemonade?
d. Orange juice costs £1.80 a litre, apple juice costs £1.50 a litre and lemonade costs £0.90 a litre. Work out the total cost of the punch.