Test answers - Percentages

Year: Year 5 · Duration: 40 minutes · /20

Answer to Question 1 (4 marks)

(a) Per cent means out of 100: $\frac{35}{100}$. The highest common factor of 35 and 100 is 5, so it simplifies to $\frac{7}{20}$. (1 mark)

(b) 0.7 = 0.70 = 70 hundredths = **70%**. (1 mark)

(c) Make the denominator 100 by multiplying top and bottom by 5: $\frac{85}{100}$ = **85%**. (1 mark)

(d) 8% is 8 hundredths: **0.08**. (1 mark)

Answer to Question 2 (4 marks)

(a) 50% is a half: 64 ÷ 2 = **32**. (1 mark)

(b) 25% is a quarter: 120 ÷ 4 = **30**. (1 mark)

(c) 10% is a tenth: 450 ÷ 10 = **45**. (1 mark)

(d) 10% of 70 is 7, and 30% is three times as much: 3 × 7 = **21**. (1 mark)

Answer to Question 3 (4 marks)

(a) Change to hundredths: $\frac{2}{5}$ = $\frac{40}{100}$ = **40%**. (1 mark)

(b) Write them all as percentages: 0.45 = 45%, $\frac{2}{5}$ = 40%, 41%, $\frac{1}{2}$ = 50%. In order: $\frac{2}{5}$**, 41%, 0.45,** $\frac{1}{2}$. (2 marks)

(c) 0.8 = 80 hundredths = 80%, and 80% is more than 75%. So **0.8 is bigger**. (1 mark)

Answer to Question 4 (3 marks)

(a) Tom has confused 5% with 50%. A half is 50%; 5% is only 5 out of every 100, which is one twentieth. (1 mark)

(b) 10% of £80 is £8, and 5% is half of that: **£4**. (1 mark)

(c) 15% = 10% + 5% = £8 + £4 = **£12**. (1 mark)

Answer to Question 5 (5 marks)

(a) 25% of 120 = 120 ÷ 4 = £30. New price: 120 − 30 = **£90**. (2 marks)

(b) 10% of 80 = 8. 80 − 8 = **£72**. (1 mark)

(c) 90 + 72 = **£162**. (1 mark)

(d) He saves 200 − 162 = £38. $\frac{38}{200}$ = $\frac{19}{100}$ = **19%**. (1 mark)