Test - Fractions, decimals and percentages

Year: Year 8 · Duration: 45 minutes · /20

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

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

Show your working.

Question 1 (4 marks)

Question 1 – Conversions and ordering

Answer all parts. Show your working.

a. Write $\frac{7}{8}$ as a decimal and as a percentage. (2 marks)

b. Write $\frac{4}{11}$ as a recurring decimal. (1 mark)

c. Put 0.6, $\frac{5}{8}$ and 61% in order, smallest first. (1 mark)

Question 2 (4 marks)

Question 2 – Percentages of amounts

Work out the following.

a. 35% of £240 (2 marks)
b. Increase £64 by 15%. (1 mark)
c. Write 36 as a percentage of 48. (1 mark)

Question 3 (4 marks)

Question 3 – Percentage change

A bike costs £320. In a sale, the price is reduced by 15%.

a. Find the sale price. (2 marks)
b. After the sale, the price rises by 15%. Is the new price £320? Show your working. (2 marks)

Question 4 (4 marks)

Question 4 – Problem: reverse percentages

A pair of jeans costs £42 in a sale after a reduction of 30%.

a. Find the original price. (2 marks)
b. A different shop sells the same jeans for £65 with 20% VAT included. Find the price before VAT, to the nearest penny. (2 marks)

Question 5 (4 marks)

Question 5 – Problem: compound growth

Ravi invests £500 in an account with 4% interest per year, added each year.

a. How much is in the account after 2 years? (2 marks)
b. How many years does it take to reach more than £600? Show your working in a table. (2 marks)