Test answers - Fractions: halves and quarters

Year: Year 1 · Duration: 20 minutes · /20

Answer to Question 1 (4 marks)

a. The shape is cut into 2 equal parts and 1 part is coloured. So $\frac{1}{2}$ (**a half**) is coloured. (1 mark)
b. The shape is cut into 4 equal parts and 1 part is coloured. So $\frac{1}{4}$ (**a quarter**) is coloured. (1 mark)
c. There are 4 equal parts and 3 are coloured. So $\frac{3}{4}$ (**three quarters**) is coloured. (1 mark)
d. A whole cut into quarters has 4 equal parts, so **4** quarters make a whole. (1 mark)

Answer to Question 2 (4 marks)

a. Share 6 into 2 equal groups: 3 and 3. Half of 6 is **3**. (1 mark)
b. Share 14 into 2 equal groups: 7 and 7. Half of 14 is **7**, because 7 + 7 = 14. (1 mark)
c. Half of 20 is **10**, because the double 10 + 10 = 20. (1 mark)
d. **No.** Share 9 into 2 equal groups: 4 and 4 makes 8, and 1 is left over. 9 is an odd number, so its half is not a whole number. (1 mark: no and the 1 left over)

Answer to Question 3 (4 marks)

a. Share 4 into 4 equal groups: one in each group. A quarter of 4 is **1**. (1 mark)
b. Half of 8 is 4, and half of 4 is 2. A quarter is half of a half, so a quarter of 8 is **2**. (1 mark)
c. Half of 16 is 8, and half of 8 is 4. So a quarter of 16 is **4**. (1 mark)
d. Half of 20 is 10, and half of 10 is 5. So a quarter of 20 is **5**. Check: 5 + 5 + 5 + 5 = 20. (1 mark)

Answer to Question 4 (4 marks)

a. Two pieces that are the same size are halves, so each piece is called **a half**. (1 mark)
b. Four pieces that are the same size are quarters, so each piece is called **a quarter**. (1 mark)
c. **No.** Dev has 2 pieces, but they are not the same size. Halves must be equal, so a big piece and a small piece are not halves. (1 mark: no and the pieces are

unequal)
d. Two quarters cover the same part as one half, so two quarters make **a half**. (1 mark)

Answer to Question 5 (4 marks)

a. A quarter of 8 means 8 slices shared into 4 equal groups of 2. Nina eats **2** slices. (1 mark)
b. Half of 8 means 8 slices shared into 2 equal groups of 4. Her brother eats **4** slices. (1 mark)
c. Add the slices: 2 + 4 = **6** slices eaten. (1 mark)
d. 8 − 6 = **2** slices are left. 2 slices out of 8 is the same as Nina's share, so it is **a quarter** of the cake. (1 mark for 2 slices and a quarter)