Test answers - Fractions: thirds, quarters and halves

Year: Year 2 · Duration: 30 minutes · /20

Answer to Question 1 (4 marks)

a. The rectangle is split into 4 equal parts and 1 part is shaded. The bottom number shows the 4 equal parts and the top number shows the 1 shaded part: $\frac{1}{4}$. (2 marks: 1 for equal parts counted, 1 for the fraction)
b. The circle is split into 3 equal parts and 2 of them are shaded, so the fraction is $\frac{2}{3}$ (two thirds). (2 marks: 1 for seeing 3 equal parts, 1 for $\frac{2}{3}$)

Answer to Question 2 (4 marks)

a. Half means divide by 2: 18 ÷ 2 = **9**, because 9 + 9 = 18. (1 mark)
b. A quarter means divide by 4. Half of 28 is 14 and half of 14 is 7, so a quarter of 28 is **7**. (1 mark)
c. A third means divide by 3: 24 ÷ 3 = **8**, because 8 + 8 + 8 = 24. (1 mark)
d. First find one quarter: 12 ÷ 4 = 3. Three quarters is 3 lots of that: 3 + 3 + 3 = **9**. (1 mark)

Answer to Question 3 (4 marks)

a. Two quarters fill the same space as one half, so $\frac{2}{4} = \frac{1}{2}$. The missing number is **2**. (1 mark)
b. A whole cut into quarters has 4 equal parts, so **4** quarters make one whole. (1 mark)
c. $\frac{2}{4}$ is the same amount as $\frac{1}{2}$. Both children eat half of the pizza, so they eat **the same amount**; nobody eats more. (2 marks: 1 for equal fractions, 1 for the conclusion)

Answer to Question 4 (4 marks)

a. A quarter of 24 means 24 ÷ 4. Half of 24 is 12 and half of 12 is 6, so Ali eats **6** sweets. (1 mark)
b. Take Ali's sweets away from the jar: 24 − 6 = **18** sweets left. (1 mark)
c. His sister eats half of the 18 left: 18 ÷ 2 = **9** sweets. (1 mark)
d. Take her 9 away from the 18: 18 − 9 = **9** sweets are left at the end. (1 mark)

Answer to Question 5 (4 marks)

a. A third of 24 means 24 ÷ 3. 8 + 8 + 8 = 24, so **8** children bring sandwiches. (1 mark)
b. A quarter of 24 means 24 ÷ 4 = **6**, so 6 children bring a hot meal. (1 mark)
c. Take both groups away from 24: 24 − 8 = 16, then 16 − 6 = **10** children buy lunch at the cafe. (1 mark)
d. Each of the 8 sandwich children has 2 biscuits. Count in 2s eight times: 8 × 2 = **16** biscuits. (1 mark)