WONDERLEARNERZ PRIMARY ACADEMY â€" OFFICIAL ANSWER KEY & MARKING SCHEME

Fractions: Worksheet 3 [ANSWER KEY]

Grade 5 | Mathematics | Ch 4: Fractions | Total Marks: 19 | Time: 45 Minutes

Q1. Which fraction is equivalent to 4/12? [1 Mark]

Correct Answer: 1/3

Explanation: Divide numerator and denominator by 4: 4/12 = 1/3.

Q2. What is the simplest form of the fraction 18/24? [1 Mark]

Correct Answer: 3/4

Explanation: Divide both numerator and denominator by their greatest common factor (6): 18/6 / 24/6 = 3/4.

Q3. Which of the following fractions is strictly greater than 1/2? [1 Mark]

Correct Answer: 5/8

Explanation: Convert to eighths: 1/2 = 4/8. Since 5/8 > 4/8, 5/8 is greater than 1/2.

Q4. Convert the improper fraction 17/5 into a mixed number. [1 Mark]

Correct Answer: 3 2/5

Explanation: 17 / 5 = 3 with remainder 2, so 17/5 = 3 2/5.

Q5. At the Harbor Marine Terminal bakery, chef prepared 3/8 of a batch of blueberry muffins in the morning and 2/8 in the afternoon. What fraction of the batch was baked in total? [1 Mark]

Correct Answer: 5/8

Explanation: Add fractions with like denominators: 3/8 + 2/8 = 5/8 of the batch.

Q6. A painter uses 7/10 of a bucket of green paint for a garden fence. What fraction of paint remains in the bucket? [1 Mark]

Correct Answer: 3/10

Explanation: 1 whole bucket - 7/10 = 10/10 - 7/10 = 3/10 bucket remaining.

Q7. In a class reading contest, Maya read 2/3 of her novel while Ethan read 3/5 of his identical novel. Who read a greater fraction of the novel? [1 Mark]

Correct Answer: Maya

Explanation: Find common denominator 15: Maya = 10/15, Ethan = 9/15. Since 10/15 > 9/15, Maya read more.

Q8. Find the missing numerator: 3/4 = [?] / 20. [1 Mark]

Correct Answer: 15

Explanation: Multiply denominator by 5 (4 x 5 = 20), so multiply numerator by 5: 3 x 5 = 15.

Q9. Fill in the missing denominator: 4/7 = 16 / [?]. [1 Mark]

Correct Answer: 28

Explanation: Numerator is multiplied by 4 (4 x 4 = 16), so 7 x 4 = 28.

Q10. Lucas says: '2/5 + 1/5 = 3/10 because you add the top numbers and add the bottom numbers.' Identify Lucas's mistake and state the correct sum. [1 Mark]

Correct Answer: 3/5

Explanation: Lucas added the denominators. When adding like fractions, the denominator stays the same: 2/5 + 1/5 = 3/5.

Q11. Sophia claims: '1/3 is larger than 1/2 because 3 is larger than 2.' Explain the flaw in Sophia's reasoning. [1 Mark]

Correct Answer: 1/2 is larger than 1/3

Explanation: In unit fractions, a larger denominator means the whole is divided into more, smaller pieces. 1/2 is half, which is greater than 1/3.

Q12. Explain why 2/3 and 6/9 represent the exact same amount on a number line. **[2 Marks]**

Correct Answer: Dividing each third of the whole into 3 equal sub-parts gives ninths. 2 thirds contain exactly 2 x 3 = 6 ninths, landing at the exact same physical coordinate.

Explanation: Multiplying top and bottom by 3 scales the partition without changing the actual value or position.

Q13. How do you compare two fractions with different denominators, such as 3/4 and 5/6? Explain the step-by-step method. **[2 Marks]**

Correct Answer: Find the least common denominator (12). Convert 3/4 = 9/12 and 5/6 = 10/12. Since 10/12 > 9/12, 5/6 is greater than 3/4.

Explanation: Convert both fractions to equivalent fractions with a common denominator, then compare numerators.

Q14. A water jug contains 2 1/4 litres of juice. After guests drink 1 3/4 litres, how many litres of juice remain? **[2 Marks]**

Correct Answer: 1/2 litre

Explanation: Convert to fourths: 9/4 - 7/4 = 2/4 = 1/2 litre.

Q15. Find a fraction that lies strictly between 1/3 and 1/2. **[2 Marks]**

Correct Answer: 5/12

Explanation: Convert to common denominator 12: 1/3 = 4/12 and 1/2 = 6/12. The fraction 5/12 lies strictly between 4/12 and 6/12.