Fractions and decimals topic test

Name: _____ Date: _____

15 questions | 37 marks | 45 minutes

A progressive by-hand paper on fraction forms, calculations, decimal methods and practical reasoning.

No calculator needed.

1. Simplify $\frac{20}{28}$. [1 mark]

2. Write $\frac{19}{4}$ as a mixed number. [1 mark]

3. Order 0.45, $\frac{7}{16}$ and 0.48 from smallest to largest. [2 marks]

4. Calculate $\frac{5}{12} + \frac{1}{3}$. [2 marks]

5. Calculate $\frac{7}{9} - \frac{2}{3}$. [2 marks]

6. Calculate $\frac{2}{5} \times \frac{15}{8}$. [2 marks]

7. Calculate $\frac{7}{8} \div \frac{1}{4}$. [2 marks]

8. Calculate $6.4 - 2.85$. [2 marks]

9. Calculate 0.24×1.5. [2 marks]

10. Calculate $5.4 \div 0.6$. [2 marks]

11. Ana writes $\frac{1}{2} + \frac{1}{3} = \frac{2}{5}$. Explain the error and give the correct answer. [3 marks]

12. A rope is $3\frac{1}{2}$ m long. A piece of $1\frac{3}{4}$ m is removed. Find the length left. [3 marks]

13. A cafe has 20 dollars for supplies. Four packets cost 2.65 dollars each. [4 marks]

(a) Find the cost of the four packets. [2 marks]

(b) Find the money left. [2 marks]

14. A container holds $2\frac{1}{4}$ L. Each bottle holds $\frac{2}{5}$ L. [5 marks]

(a) How many complete bottles can be filled? [3 marks]

(b) How much remains in the container? [2 marks]

15. A rectangular garden is $2\frac{1}{2}$ m long and $1\frac{4}{5}$ m wide. A student says its area is 45 square metres. Estimate first, then calculate the correct area and explain whether 45 is sensible. [4 marks]