Year 6 Decimals topic test

12 questions | 21 marks | 30 minutes

Start with familiar skills, then explain decisions and solve practical problems. Show your working.

Equivalent correct methods earn the corresponding marks.

1. Calculate $2.7 + 0.46$. [1 mark]

$2.70 + 0.46 = 3.16$.

Answer: 3.16.

2. Calculate $9.08 - 4.6$. [2 marks]

$9.08 - 4.60 = 4.48$.

Answer: 4.48.

3. Calculate $6.375 + 2.04$. [2 marks]

$6.375 + 2.040 = 8.415$.

Answer: 8.415.

4. Calculate $15 - 7.685$. [2 marks]

$15.000 - 7.685 = 7.315$.

Answer: 7.315.

5. Calculate 0.835×100. [1 mark]

The digits each become worth 100 times as much.

Answer: 83.5.

6. Calculate $42.6 \div 1,000$. [1 mark]

The digits each become worth one thousandth as much.

Answer: 0.0426.

7. Calculate 3.65×40. [2 marks]

$3.65 \times 4 \times 10 = 14.6 \times 10 = 146.$

Answer: 146.

8. Calculate $27.6 \div 30$. [2 marks]

$27.6 \div 3 \div 10 = 9.2 \div 10 = 0.92.$

Answer: 0.92.

9. A string has lengths 3.75 m, 2.6 m and 0.825 m joined end to end. Find the total length. [2 marks]

$3.750 + 2.600 + 0.825 = 7.175.$

Answer: 7.175 m.

10. Estimate $19.85 + 30.12 + 9.96$ using whole numbers. [1 mark]

$20 + 30 + 10 = 60.$

Answer: About 60.

11. A school has 100 dollars. It spends 46.75 dollars on paper and 28.90 dollars on paint. How much remains? [3 marks]

$46.75 + 28.90 = 75.65.$

$100.00 - 75.65 = 24.35.$

Answer: 24.35 dollars.

12. Luca writes $5.4 \times 100 = 5.400$. Explain the mistake and correct it. [2 marks]

Multiplying by 100 makes each digit worth 100 times as much.

Answer: 5.400 still equals 5.4; the correct product is 540.