

Answer Key — Fraction–Decimal Equivalence

Year 4 Mathematics · Number and algebra · WA4MNADE1

Section A — Fluency (16 marks, 1 mark each)

1. 0.3
2. 0.7
3. 0.1
4. 0.9
5. 0.45
6. 0.08
7. 0.6
8. 0.12
9. 0.5
10. 0.25
11. 0.75
12. $\frac{4}{10}$
13. $\frac{7}{100}$
14. $\frac{9}{10}$
15. $\frac{35}{100}$
16. $\frac{1}{2}$ (or $\frac{5}{10}$)

Section B — Core (21 marks)

1. $\frac{1}{4} = 0.25$. [3 marks]
2. (a) $\frac{6}{10}$. (b) $\frac{3}{5}$. [2 marks part (a), 2 marks part (b)]
3. $\frac{45}{100} = 0.45$. [3 marks]
4. (a) $\frac{75}{100}$. (b) $\frac{3}{4}$. [2 marks part (a), 2 marks part (b)]
5. $\frac{7}{10} = 0.7$. [3 marks]
6. (a) $\frac{8}{100}$. (b) \$8. [2 marks part (a), 2 marks part (b)]

Section C — Reasoning (9 marks) — sample responses, award marks for valid reasoning

1. The numerator becomes the digit after the decimal point, since tenths are the first decimal place; for example $\frac{3}{10}$ becomes 0.3. [2 marks]
2. The student wrote the numerator and denominator either side of a decimal point instead of converting the fraction's value; the correct decimal is 0.75, since $\frac{3}{4}$ is three-quarters of a whole. [2 marks]
3. $\frac{1}{2}$ and $\frac{5}{10}$ are equivalent fractions (the same value written differently), so they must convert to the same decimal, 0.5. [2 marks]
4. False — $\frac{3}{4}$ does not become 0.4, since "placing a decimal point in front" ignores the denominator; $\frac{3}{4}$ actually equals 0.75, found by working out what 3 divided by 4 is, or knowing the common equivalence $\frac{3}{4} = \frac{75}{100}$. [3 marks]

Section D — Challenge (7 marks)

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1. $63/100$. As decimals: $0.37 + 0.63 = 1.00$. [2 marks]
2. 0.25, 0.50, 0.75. [2 marks]
3. $3/20 = 15/100 = 0.15$. [3 marks]