



GCSE Foundation

Number



51 minutes



49 marks

Equivalence

M1. (a) $10.03 + 9.78 + 10.61 + 12.9(0) + 10.08 (= 53.4)$

Allow one error

M1

$$\frac{\text{their } 53.4}{5} (= 10.68)$$

M1

10.68 and Erik

A1

Alternative method

$$10.03 + 9.78 + 10.61 + 12.9(0) + 10.08 (= 53.4)$$

Allow one error

M1

$$10.31 \times 5 (= 51.55)$$

M1

51.55 and 53.4 and Erik

A1

(b) $10.31 + 0.34 (= 10.65)$

$$\frac{10.03 + 10.61 + 10.08}{3} (= 10.24)$$

M1

Oscar and 10.65 or Oscar and 10.24

A1

[5]

M2. (a) 7.5

Not equivalent to $\frac{3}{4}$

or 0.75 or 75%

oe or other valid reason

B1

(b) $\frac{4}{10}$ and

Not equivalent to $\frac{1}{3}$

oe or other valid reason

B1

(c) $\sqrt{125}$

Not an exact square root
 oe or other valid reason

B1

(d) 15

Not a prime number or other valid reason
 eg only multiple of 3
 or only multiple of 5

B1

[4]

M3. $3 \div 8$ or $\frac{3}{8} \times 100$ or $\frac{38}{100}$ or 38(%) or 37.(5%)

M1

0.37(5)

or $\frac{76}{200}$ and $\frac{75}{200}$

or 37.(5%) and 38(%)
 oe

A1

Both numbers in same format and correct conclusion from their values

Strand (ii)

Dependent on M1 and correct method(s) for conversion(s)

SC1 for $\left(\frac{1}{8} =\right) 0.125$ or 12.5%

Q1

[3]

M4. (a) 10^5

B1

(b) 20

B2 for 8 and 25 seen

B1 for 8 or 25 seen

B3

[4]

M5. (a) (0).8(0)

B1

(b) $\frac{7}{10}$

oe eg $\frac{14}{20}, \frac{70}{100}$

B1

(c) (0).75

B1

(d) 0.7, $\frac{3}{4}$, 80(%)

In any format

Allow correct answer or ft from their answers to a,b,c.

B1 ft

[4]

M6. (a) (i) 25(%)

B1

(ii) 0.3(0)

B1

(iii) 0.2(0) $\frac{1}{4}$ 30(%)

Allow answers written as decimals or percentages

B1

(b) (i) 12

B1

(ii) 3

B1

(c) $3 \div 8$ or $(1 \div 8) \times 3$

oe or $\left(\frac{1}{8}\right) = (0).125$

M1

(0).375

SC1 37.5% or 37.5

100

A1

[7]

M7. (a) (0).75

B1

90(%)

B1

$$\frac{3}{10}$$

oe eg $\frac{30}{100}$

B1

(b) 30(%), $\frac{3}{4}$, 0.9

oe

B1

[4]

M8. Two equivalent fractions with the same denominator

eg $\frac{2}{8}$ and $\frac{1}{8}$ or $\frac{4}{16}$ and $\frac{2}{16}$

or $\frac{8}{32}$ and $\frac{4}{32}$

oe

or $\frac{1}{4} + \frac{1}{8} \left(= \frac{3}{8} \right)$

Allow 2 lists of equivalent fractions with at least 3 correct in each list

eg $\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16} \dots$

and $\frac{1}{8} = \frac{2}{16} = \frac{3}{24} = \frac{4}{32} \dots$

M1

Correct equivalent fraction

$1\frac{1}{2}$ or $\frac{3}{2}$ or $\frac{6}{4}$ oe

or $\frac{3}{8} \div 2$

M1

$$\frac{3}{16}$$

A1

Alternative method

0.25 and 0.125 or

25% and 12.5%

M1

0.1875 or 18.75%

A1

$$\frac{3}{16}$$

A1

[3]

M9. (a) $\frac{4}{5}$

B1 $\frac{8}{10}$ *seen*

B2

(b) (i) $270 \div 10 \times 3$
oe

M1

81

A1

(ii) $270 - \text{their } 81$
 0.7×270 *oe*

M1

189

Correct or ft

A1 ft

[6]

M10. One correct conversion

Decimals 0.65, 0.7 and 0.64

M1

All 3 numbers correct in same form

Percentages 65%, 70% and 64%

M1

$$\frac{16}{25}, 65\%, 0.7$$

SC1 Correct answer no working

A1

[3]

M11. $60 \times 100 \div 80$ or $\frac{3}{4}$

oe

*or Two fractions with the same denominators
and one correct numerator*

eg, $\frac{15}{20}, \frac{14}{20}$ or $\frac{300}{400}, \frac{280}{400}$ oe

M1

75 (%) or 0.75

*or $\frac{15}{20}$ **and** $\frac{14}{20}$ or $\frac{300}{400}$ **and** $\frac{280}{400}$ oe*

M1

75 (%) **and** 70 (%) and Test 1 or

0.75 **and** 0.7(0) and Test 1

*Correct fractions **and** Test 1*

A1

[3]

M12. $50 \div 400$

$\frac{3.5(0)}{4} \times 100$ or $1 - \frac{3.5}{4}$

M1

$\times 100$

100 – above or above $\times 100$

M1 dep

12.5

A1

[3]

