M1.

ab or −12
and
−3, 8 and −12 seen

B1 for $\left(\frac{b}{a}=\right)$ *−3 or (a − b =) 8*

or (ab =) −12

B2

[2]

M2.

(a) 41 or 29 used

M1

12

A1

(b) 59 or 50 used

M1

109

A1

[4]

M3.

(a) Box A → p(3) = $\frac{1}{6}$ and

Box B → p(3) = $\frac{1}{3}$ and

Box C → p(3) = $\frac{2}{5}$ and

Box D → p(3) = $\frac{2}{4}$ or $\frac{1}{2}$

Allow one incorrect probability

M1

(Box) D and all probabilities correct

A1

(b) (Box) A and (Box) B

B1

[3]

M4.(a) 35 and 65

B1

(b) 34 and 76

B1

(c) 76

B1

(d) 21

B1

[4]

M5. Correct order **and** all four correct

values seen in same format

3, 3.15, 3.25, 3.5(0)

or 3, $3\frac{15}{100}$, $3\frac{25}{100}$, $3\frac{50}{100}$

or 3, $3\frac{3}{20}$, $3\frac{1}{4}$, $3\frac{1}{2}$

or 300(%), 315(%), 325(%), 350(%)

or $\sqrt{9}$, 3.15, $\frac{13}{4}$, $3\frac{1}{2}$ after values

seen in same format

oe

B2 all four correct values in same format

or

three correct values in same format and correct order for their values

B1 three correct values in same format

SC1 $\sqrt{9}$*, 3.15,* $\frac{13}{4}$, $3\frac{1}{2}$ *with no working*

B3

[3]

M6.(a) 431

B1

(b) 388

B1

(c) 293 and 107

In any order

B1

(d) 255 and 205

Must be in order

B1

[4]

M7.(a) London

Accept −4.9 (°C)

B1

(b) 10.5

Accept −10.5

B1

(c) −5.9

B1

[3]

M8.

(a) 15.6 ÷ 4 or 156 ÷ 40
or
$\frac{156}{100} \times \frac{100}{40}$

Correctly multiplying both numbers by the same number so that 0.4 becomes an integer

M1

3.9

oe
SC1 digits 39

A1

(b) Any decimal greater than $0.\dot{6}\dot{3}$ and less than $0.\dot{7}$

B1 Any fraction or percentage between $\frac{7}{11}$ and $\frac{7}{9}$ (eg $\frac{7}{10}$ or 70%) or

Correctly evaluates $\frac{7}{11}$ to 0.63... or $\frac{7}{9}$ to 0.77...

B2

(c) Any correct fraction

eg $\frac{83}{200}, \frac{415}{1000}, \frac{41}{99}, \frac{41}{98}, \frac{42}{101}, \frac{42}{102}$

B1 $\frac{41.5}{100}$

or

any 'correct' fraction with non-integer numerator and/or denominator

or

any decimal between 41% and 42%

B2

[6]

M9.(a) $5x < 6 + 2$

or $5x < 8$

$\frac{8}{5}$ *or 1.6 seen*

oe

M1

$x < \frac{8}{5}$

oe

A1

Additional Guidance

Sight of 1.6 or $\frac{8}{5}$ score M1

(b) 2, 3, 4, 5, 6

B1 for one extra or one missing

eg

2, 3, 4, 5

1, 2, 3, 4, 5, 6

2, 3, 4, 5, 6, 7

2, 3, 5, 6

B2

[4]

M10.(a) –3

Accept Thu or Thursday

B1

(b) 4

Accept –4

B1

(c) –5

B1

[3]

M11.(a) 3.6

B1

(b) 0.325 0.5 0.62

B1

(c) $\frac{4}{5}$ and 80%

B1 for one correct (and one incorrect) or for two correct and one incorrect

Any indication

B2

[4]

M12.0.207 27% $\frac{56}{200}$

oe any format

B1 for 0.27 or $\frac{27}{100}$ *or* $\frac{54}{200}$

or 20.7(%) or $\frac{20.7}{100}$ *or* $\frac{41.4}{200}$

or 0.28 or 28(%) or $\frac{28}{100}$

B2 **[2]**

M13.(a) Six thousand two hundred (and) seventeen

Condone spelling mistakes if intention clear

B1

(b) 6220

B1

(c) 1267

B1

(d) 2761

B1 **[4]**

M14.(a) 2678

B1

(b) 63

B1

(c) 279

B1 **[3]**

M15.(a) (Match) 4 or 43 685

B1

(b) 128 or 417 seen

Allow −128 or −417 seen

M1

(Match) 2 or 19872

All working must be correct

SC1 for 20417 or (Match) 3

A1

(c) 32 473 − 3584

M1

28 889

A1

29 000

Rounding to nearest thousand

SC1 32 000 and 4000

SC1 28 000

B1ft

[6]