M1.

ab or −12
and
−3, 8 and −12 seen

B1 for $\left(\dfrac{b}{a} =\right)$ −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) = $\dfrac{1}{6}$ and

Box B → p(3) = $\dfrac{1}{3}$ and

Box C → p(3) = $\dfrac{2}{5}$ 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
$\dfrac{156}{100}$ x $\dfrac{100}{40}$

*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 $\dfrac{7}{11}$ and $\dfrac{7}{9}$ (eg $\dfrac{7}{10}$ or 70%) or

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

B2

(c)   Any correct fraction

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

B1 $\dfrac{41.5}{100}$

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 $5x < 8$

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

oe

M1

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

oe

A1

Additional Guidance

Sight of 1.6 or $\dfrac{8}{5}$ 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 $\frac{41.4}{200}$

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

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]