

* There is additional guidance in the mark scheme including some multiple choice questions where an incorrect answer may negate a correct answer.

Each question is worth 1 mark unless otherwise stated. [Full mark schemes can be found here.](#)

Paper 1 Arithmetic

Qu. Answer

- 1 6,090
- 2 8,357
- 3 20
- 4 336
- 5 369
- 6 8,993
- 7 60
- 8 10
- 9 0
- 10 13
- 11* 22
- 12 8
- 13 110
- 14 253.4
- 15 10
- 16 27
- 17 101,000
- 18* 600
- 19 4.75
- 20 0.009
- 21 7.1
- 22* 6/7
- 23* 22,572 (2m)
- 24* 19/20
- 25* 24 (2m)
- 26* 3 3/10 OR 33/10
- 27* 112
- 28* 23/36
- 29* 459
- 30* 215,016 (2m)
- 31* 2/9
- 32* 1 3/4 OR 7/4
- 33* 162
- 34* 17 1/2 OR 70/4 OR 35/2
- 35 450
- 36* 97 (2m)

Paper 2 Reasoning

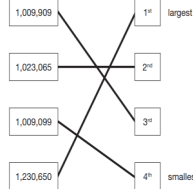
Qu. Answer

4	x	8	=	32
x		x		
3	x	7	=	21
=		=		
12		56		

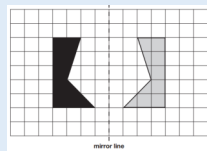
1

2 8,072

3*



4*



5*

110 155 200 245 290 335

2 marks: all correct; 1 mark: 2 correct

6 10

7* 2.5 OR 2 1/2

8a*

11 25 53

8b*

25 53 109

9* 124 (2m)

10* Option 2: number of tickets $\times 24 + 3$

11a* 0.25

11b* 65(p) OR (£)0.65

12*

$\frac{7}{10} > 0.07$
 $\frac{23}{1000} < 0.23$

2 marks: 3 of 3 points below, 1 mark: 2 of 3 points

13*

- angle in range 33° to 37° inclusive for angle marked 35°
- angle in range 88° to 92° inclusive for right angle
- triangle has been drawn on 8cm line provided they have constructed both angles within tolerance of line 7.9cm to 8.1cm

14*

2 marks: all correct; 1 mark: 2 correct
Order as shown: 40,000 39,000 39,500

15 25

16 4

17* 244 (2m)

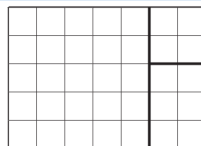
18* Explanation of why 95 AND 87 are NOT prime

19 3.75 (2m)

20* Option 3 and 4 ticked (1/5 and 3/15) (2m)

Example as shown,
or a different orientation:

21*



22a* 2/5

22b* 10.7 (2m)

23* 720 (2m)

Paper 3 Reasoning

Qu. Answer

1* £7,899

2a* 7

2b* 4,000,000

3* Option 4: 10 - a

4* Order as shown: 0.009kg, 0.99kg, 1.025kg, 1.25kg

5* $\begin{array}{|c|c|c|} \hline 1 & 2 & 8 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 7 & 2 \\ \hline \end{array} = \begin{array}{|c|c|c|} \hline 2 & 0 & 0 \\ \hline \end{array}$

6* £6.87 (2m)

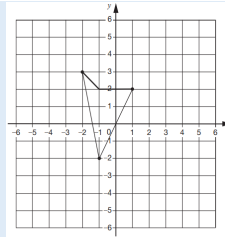
7a 155

7b Order as shown: 2, 3, 2

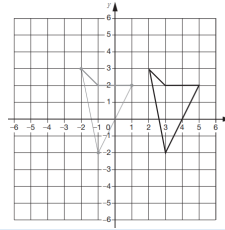
8* 1,356 (2m)

9* 2,250

10a*



10b*



Two marks for all four given numbers placed completely correctly 7 times:

11* Prime: 3, 5 Factors of 12: 3, 4, 6 Factors of 15: 3, 5
One mark for three of the given numbers all placed completely correctly

12* length = 19 cm width = 9.1 cm

Explanation that includes a counter example, e.g.:

- Sometimes it will be acute
- Some acute angles are half an obtuse angle, but not all
- Double an acute angle, you get a right angle OR

13*

Explanation that demonstrates where statement in the question is not correct, e.g.:

- If the acute angle is less than 45° then doubling it will be less than 90°, so it won't be obtuse (more than 90°).

14 91

15 400

16* £1.85 (2m)

17* $x = 8$ AND $y = 6$ OR $x = 6$ AND $y = 7$ OR
 $x = 4$ AND $y = 8$ OR $x = 2$ AND $y = 9$

18* 2 marks: all correct; 1 mark: 2 correct
Option 1, 2 and 4: 1/2, 2/8, 7/16

19* 7,174 (3m)

20* 29 (2m)

21a* B is (55, 30)

21b* D is (55, 14)

22* 10.5 (cm)

- Explanation that gives correct values for PQ and/or QR: PQ = 640m; QR is 160, 160 $\times 4$ is not 600m OR

23* Explanation recognising PR is 800m and must be 5 times QR OR
Explanation that PQ is not 600m