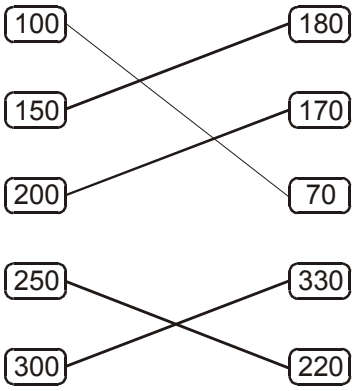
Mathematics Mark scheme

Test A

0 min
0 marks

1. Award **TWO** marks for the four lines drawn as shown: up to 2



Do not *award any marks if two or more incorrect lines are drawn.*
Lines need not touch the boxes, provided the intention is clear.

If the answer is incorrect, award **ONE** mark for three correct lines drawn **AND** not more than one incorrect line drawn.

[2]

2. One of the following triples: 1

11, 12, 17 13, 18, 19

11, 13, 16 14, 17, 19

11, 14, 15 15, 16, 19

12, 13, 15 15, 17, 18

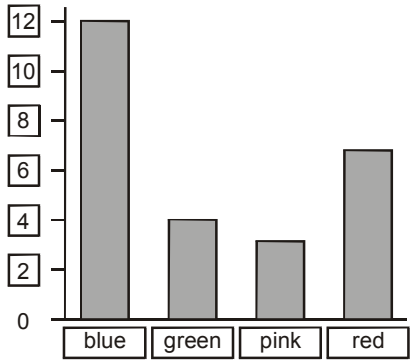
Accept alternative unambiguous indications, eg ticks, crosses.

Do not *award the mark if fewer or more than three numbers are circled.*

[1]

3. (a) Vertical axis completed correctly. 1

(b) Horizontal axis completed correctly. 1



Accept abbreviations or recognizable misspellings.

[2]

4. (a) 30 minutes 1

The answer is a time interval.

(b) 9:25 am 1

The answer is a specific time.

[2]

5. 14 1

[1]

6. (a) B **AND** D 1

Both letters must be given.
Letters may be given in either order.

(b) C **AND** E 1

Both letters must be given.
Letters may be given in either order.

[2]

7. (a) Award **TWO** marks for the correct answer of £4.10 **OR** 410p up to 2

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

$4 \times 60 = 240$

$2 \times 85 = 170$

$240 + 170 =$ wrong answer

*Accept for **ONE** mark £410 **OR** £410p as evidence of appropriate working.*

*Calculation must be performed for the award of **ONE** mark.*

(b) £3.00 1

[3]

8. 1614 1

[1]

9. Award **TWO** marks for all five numbers in any order as shown: up to 2

624, 642, 646, 662, 664 U1

Ignore 626 or repeats of the five correct responses.

If the answer is incorrect, award **ONE** mark for:

- four out of five numbers correct and none incorrect

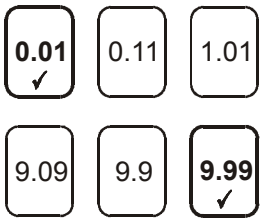
OR

- five numbers correct and only one incorrect.

*For **ONE** mark, ignore four-digit numbers.*

[2]

10. Two cards ticked as shown: 1



Accept alternative unambiguous indications such as circling or a line joining the correct pair of cards.

[1]

11. $\frac{5}{9}$ 1

Accept equivalent fractions.

[1]

12. Award **TWO** marks for signs written in the order shown: up to 2

<

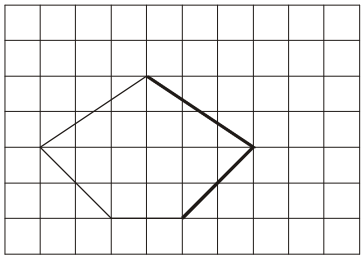
>

=

If the answer is incorrect, award **ONE** mark for two out of three signs correct.

[2]

13. Two more lines drawn as shown: 1



Accept slight inaccuracies in drawing.

***Do not** accept lines drawn outside of the grid.*

Ignore line of symmetry if drawn.

[1]

14. An explanation which recognises that the numbers of odd and even cards are not equal, eg 1 U1

- 'Because there are more odds than evens';
- 'Because there are fewer evens than odds';
- 'Because Sapna scores on more than half of the cards';
- 'Because there are only three even numbers';
- 'Because Josh has 3 cards and Sapna has 4 cards';
- 'Because Sapna has more chances'.

No mark is awarded for circling 'No' alone.

***Do not** accept vague or arbitrary explanations, eg*

- *'Because fair means half the time';*
- *'Because there are 7 cards';*
- *'Because there is an odd number of cards';*
- *'Because the game is unfair';*
- *'Because Sapna will always win'.*

If 'Yes' is circled but a correct, unambiguous explanation is given, then award the mark.

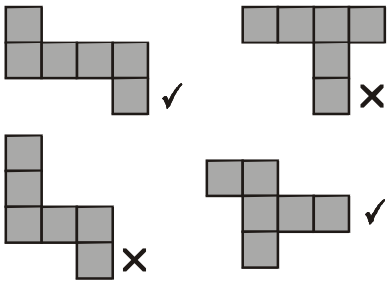
[1]

15. (a) Answer in the range 104 to 106 inclusive. 1

(b) 5 1

[2]

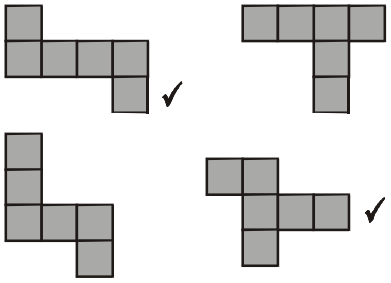
16. Award **TWO** marks for diagrams ticked or crossed as shown: up to 2



If the answer is incorrect, award **ONE** mark for three diagrams ticked or crossed correctly.

*Accept alternative unambiguous indications such as **Y** or **N**.*

*For **TWO** marks accept:*



[2]

17. (a) Answer in the range 126mm to 128mm inclusive. 1

(b) Answer in the range 21 degrees to 23 degrees inclusive. 1

[2]

18. Award **TWO** marks for boxes ticked and crossed as shown: up to 2

☒
☑
☒
☑

If the answer is incorrect, award **ONE** mark for any three boxes correctly completed.

*Accept alternative unambiguous indications such as **Y** or **N**.*

*For **TWO** marks, accept:*

☐
☑
☐
☑

[2]

19. 36 **AND** 9 1

Numbers may be given in either order.

[1]

20. Award **TWO** marks for the correct answer of 5291 up to 2

If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg

- long multiplication algorithm such as

$$\begin{array}{r} 143 \\ \times 37 \\ \hline 1001 \\ 4290 \end{array}$$

wrong answer

- grid method

	100	40	3
30	3000	1200	90
7	700	280	21

= wrong answer

- decomposition methods, eg

$143 \times 40 = 5720$

$143 \times 3 = 429$

5720 – 429 = wrong answer

*In all cases accept follow through of **ONE** error in working.*

***Do not** award any marks if:*

- the error is in the place value, eg the omission of the zero when multiplying by three tens,

$$\begin{array}{r} 1001 \\ +\ 429 \\ \hline \end{array}$$

- the final (answer) line of digits is missing.

Variations on algorithms are acceptable, provided they represent viable and complete methods.

*Calculation must be performed for the award of **ONE** mark.*

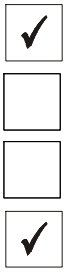
[2]

21. Award **TWO** marks for boxes ticked and crossed as shown: up to 2

If the answer is incorrect, award **ONE** mark for any three boxes correctly completed.

*Accept alternative unambiguous indications such as **Y** or **N**.*

*For **TWO** marks, accept:*



[2]

22.

$\frac{3}{5}$ $\frac{3}{4}$ $\frac{17}{20}$ $\frac{9}{10}$ 1

Fractions must be written in the correct order for the award of the mark.

Accept equivalent fractions or decimals.

[1]

23. Award **TWO** marks for the correct answer as shown: up to 2

A = **–80** B = **60** U1

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

140 ÷ 7 = 20

Accept 'minus 80'

***Do not** accept '80–'*

*Answer need not be obtained for the award of **ONE** mark.*

*Accept for **ONE** mark:*

*A = –80 **AND** B = wrong answer **OR***

*A = –80 **AND** B = blank **OR***

*A = 80 **AND** B = 60 **OR***

*A = 80 **AND** B = –60 **OR***

*A = 60 **AND** B = –80*

[2]

24. Award **TWO** marks for the correct answer of 42 up to 2

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

18 – 10 = 8

10 + (4 × 8) = wrong answer

OR

10, 18, 26, 34, wrong answer

*Calculation must be performed for the award of **ONE** mark.*

[2]