# **Mathematics**

## Mark Scheme for Test A

## 2004

0 min 0 marks

1.	(a)	115	1 m	
	(b)	30	1 m	
	(c)	69	1 m	
				[3]
2.	$\frac{1}{4}$ O	$\mathbf{R} \frac{2}{-}$	1 m	
	4			
		Accept equivalent fractions.		F41
				[1]
_				
3.	(a)	£2.45 <b>OR</b> 245p	1 m	
	(b)	juice and apple	1 m	
		OR milk and melon		
		Accept recognisable misspellings.		
		Accept recognisable misspellings.  Accept items written in either order.		
		Accept numerical substitutes for the required pairing,		
		ie 65p and 15 p		
		<b>OR</b> 55p and 25p		
				[2]
4.	Answ	ver in the range 8.4 to 8.6cm inclusive	1 m	
		Accept $8\frac{1}{2}$ cm		
				[1]

5.	Award TWO marks for all three calculations completed
	correctly as shown:

Up to 2 marks

Answers to the calculations are not required for the award of the mark.

If the answer is incorrect, award ONE mark for two calculations completed correctly, eg

Accept for ONE mark

where (\*) is any number or blank.

[2]

[2]

1 m 1 m

7. Award **TWO** marks for the correct answers of A **AND** E.

Up to 2 marks

Answers may be given in either order.

Accept unambiguous indications on the diagram.

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

• only one answer correct

OR

• two answers correct and one incorrect.

[2]

**8.** 10.8

1 m

[1]

**9.** (a) 5

Do not accept a list of months.

(b) Answer in the range of 6 degrees to 7.5 degrees inclusive.

1 m **[1]** 

**10.** (a) £2.86

(b) Award **TWO** marks for the correct answer of £2.02 **OR** 202p Up to 2 marks If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg 4.69 + 3.29 = 7.98

10 - 7.98 = wrong answer

Accept for **ONE** mark £202p **OR** £202 **OR** 2.02p as evidence of appropriate working

Calculation must be performed for the award of ONE mark

[3]

**11.** 9:20

The answer is a specific time (see Applying the mark scheme for guidance)

[1]

**12.** Award **TWO** marks for a correct number written in each of the four boxes.

Up to 2 marks

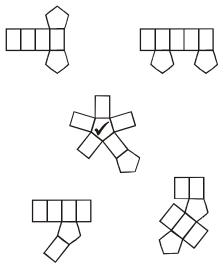
	even	not even
a square number	0 <b>OR</b> 4 <b>OR</b> 16 <b>OR</b> 36 <b>OR</b> 64	1 <b>OR</b> 9 <b>OR</b> 25 <b>OR</b> 49 <b>OR</b> 81
not a square number	even <b>AND</b> not a square <b>AND</b> less than 100	odd <b>AND</b> not square <b>AND</b> less than 100

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

Accept more than one number in each box, provided all are correct.

[2]

### **13.** One net ticked as shown:



Accept alternative unambiguous indications of the correct shape, provided the intention is clear, eg net circled

**14.** Award **TWO** marks for all four boxes completed correctly as shown: Up to 2 marks

×	5	9	8
4	20	36	32
7	35	63	56
6	30	54	48

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

15. 90 1 m [1]

16. 360 1 m [1]

17. 221.2 1 m [1]

1 m

U1

[1]

[2]

18.	Award '	ΓWO	marks	for the	correct	answer	of 2.1

Up to 2 marks

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

$$5 + 2 = 7$$
$$15 \div 5 \times 7$$

#### OR

5 new 2 old 10 new 4 old 15 new 6 old

Award **ONE** mark for an answer of 6 **OR** for 6 shown with no evidence of an incorrect method.

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

[2]

**19.** An explanation which recognises that the sum of adding three odd numbers is always odd, eg

1 m U1

- 'Because odd + odd + odd = odd';
- 'Because three odd numbers can't add up to an even number';
- 'Because an odd number of odd numbers makes an odd number'.

**Do not** accept numerical exemplification without further explanation, eg

- 'Because 21 + 23 + 7 = 51';
- 'Because 21 + 23 + 6 = 50'.

Do not accept vague or arbitrary explanations, eg

- 'Because 50 is even';
- 'Because you can only do it with two odd numbers

[1]

**20.** (5, 2)

1 m

Coordinates must be in the correct order.

Accept unambiguous answers written on the diagram.

[1]

**21.** 5

1 m

[1]

22. Award TWO marks for the correct answer of 15

Up to 2 marks

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

U1

•  $60 \div 4 = \text{wrong answer}$ 

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

OR

• a 'trial and improvement' method.

eg

$$30 \times 5 - 60 = 90$$

$$10 \times 5 - 60 = -10$$

$$20 \times 5 - 60 = 40$$

OR

• 5x - 60 = x

x = wrong answer

A 'trial and improvement' method must show evidence of improvement, but a final answer need not be reached for the award of **ONE** mark.

[2]

**23.** (a) 3 hours 35 minutes

The answer is a time interval

(see guidance)

(b) 15:15

1 m

1 m

The answer is a specific time

(see guidance)

Accept quarter past three

[2]

**24.** £180

1 m

Do not accept 180%

[1]

25. Award TWO marks for the correct answer of 64

Up to 2 marks

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

U1

 $48 \div 3 = 16$ 

 $16 \div 4 = \text{wrong answer}$ 

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

[2]