1 Here is a sequence of patterns made from grey square tiles.

| Pattern number 1 | Pattern number 2 | Pattern number 3 | Pattern number 4 |

Complete the table.

7 + 2   9 + 2

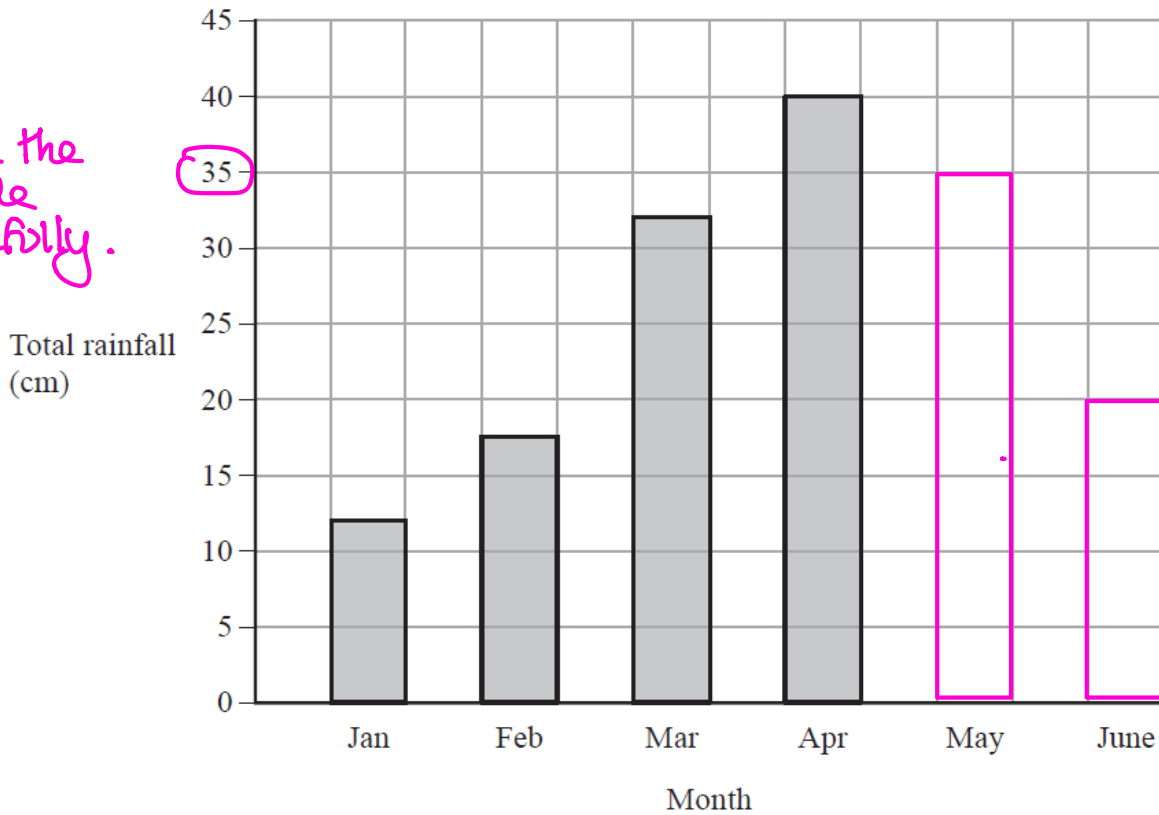| Pattern number	1	2	3	4	5	6
Number of squares	1	3	5	7	9	11

+2   +2   +2

whats the difference?

(Total for Question 1 is 1 marks)

2 The bar chart shows information about the total rainfall each month for four months in a city.

check the scale carefully.

Total rainfall (cm)

Month

In May, the total rainfall was 35 cm. ✓
In June, the total rainfall was 20 cm. ✓

Use this information to complete the bar chart.

(Total for Question 2 is 2 marks)

3 The pictogram gives information about the number of hours of sunshine on a Saturday and on a Sunday.

| Saturday | ☀ ☀ ☀ ☀ |
| Sunday | ☀ ☀ |

Key: ☀ represents 2 hours of sunshine

Work out the number of hours of sunshine on Saturday.

$2 + 2 + 2 + 2$

....................8.................... hours

(Total for Question 3 is 1 mark)

4   Here is a list of 8 letters.

<div align="center">B   C   A   A   A   A   B   A</div>

Write down the mode.

most commonly occuring

.... *A*
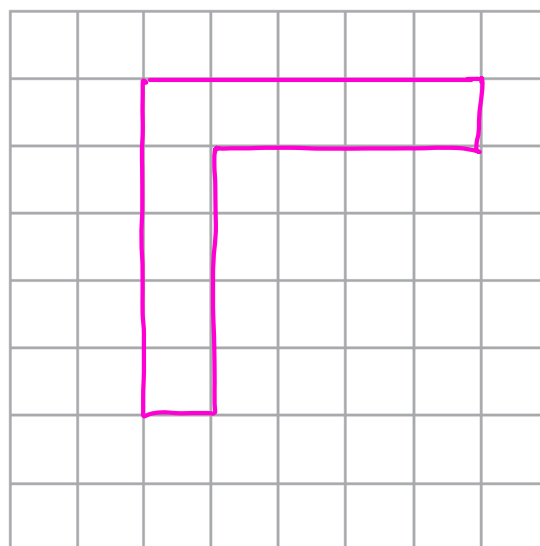
(Total for Question 4 is 1 mark)

5   Here is a sequence of patterns made from grey square tiles.

Pattern number 1   Pattern number 2   Pattern number 3   Pattern number 4
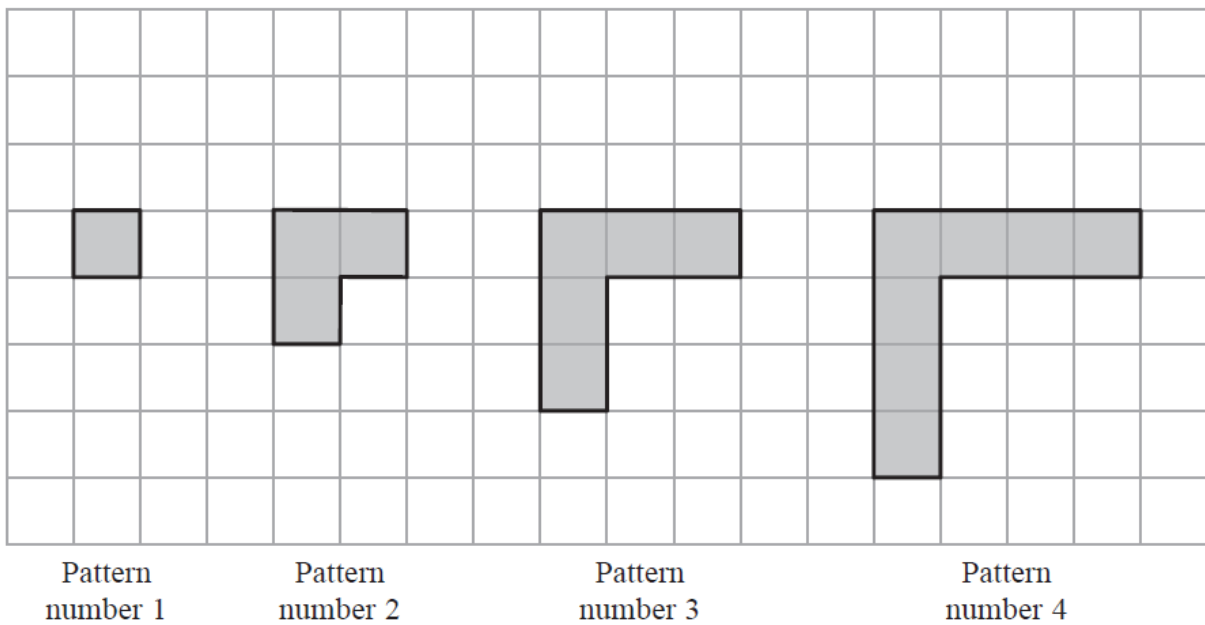
On the grid below, draw Pattern number 5

(Total for Question 5 is 1 mark)

6 Work out $20 \div (3 + 2)$

$3+2=5$ $20 \div 5 = 4$

.... 4 ....

(Total for Question 6 is 1 mark)

7 A shop sells jars of coffee.

Each jar of coffee costs £4

Michael has £23

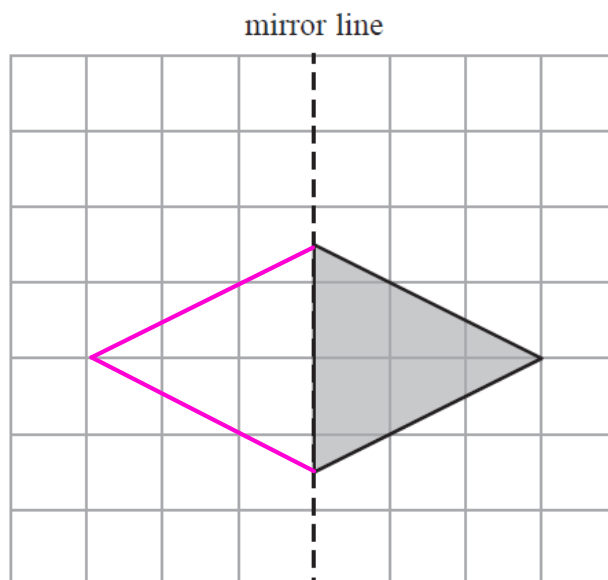Work out the greatest number of jars of coffee Michael can buy.

1 jar = 4
5 jars = £20 } ×5 ✓

6 jars = £24 ✗ not enough £

.... 5 jars ....

(Total for Question 7 is 2 marks)

8 On the grid, reflect the shaded triangle in the mirror line.

(Total for Question 8 is 1 mark)

9 Work out 3^2

$3 \times 3 = 9$

$(\text{not } 3 \times 2)$

.... 9

(Total for Question 9 is 1 mark)

10 Solve $m - 3 = 4$

$m - 3 = 4$
$ + 3 + 3$
$m = 7$

$m =$ 7

(Total for Question 10 is 1 mark)

11 Simon buys some candles.
Each candle costs £2

Simon pays with a £20 note.
He gets £6 change.

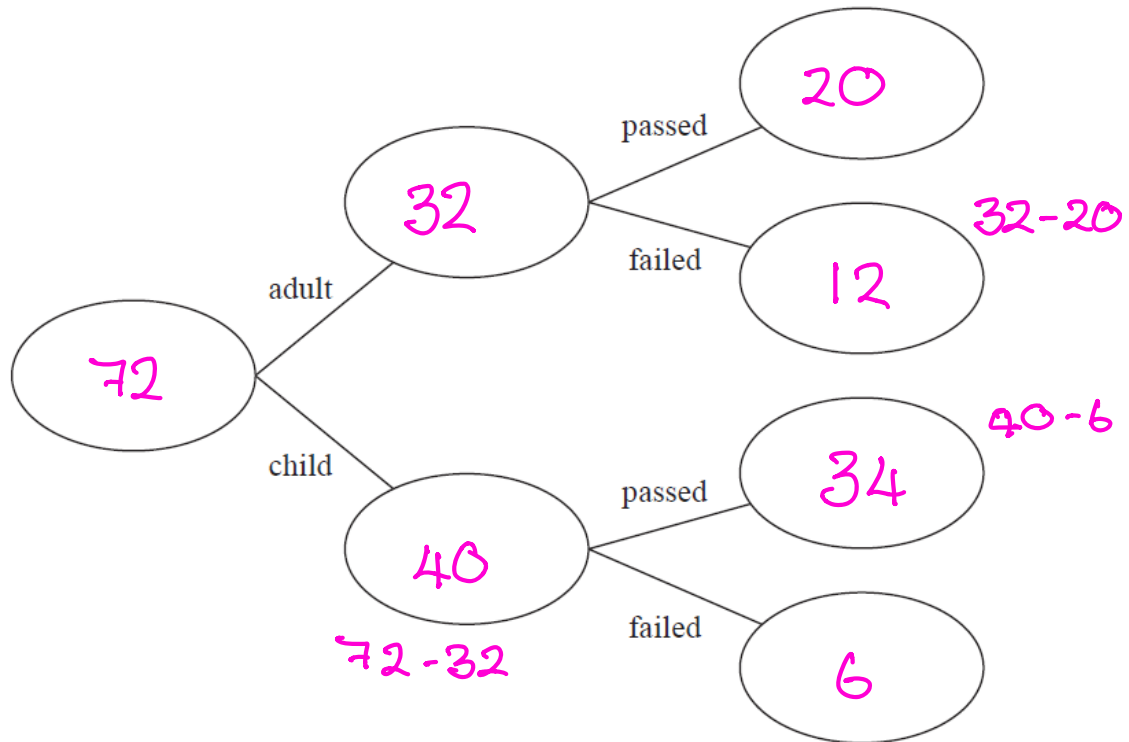Work out the number of candles Simon buys.

Spends $20 - 6 = £14$

$£14 \div £2 = 7$ so 7 candles

.... 7

(Total for Question 11 is 3 marks)

12 72 people did a test.

20 of the 32 adults who did the test passed.
6 of the children who did the test failed.

Use this information to complete the frequency tree.

20

passed

32

failed

32-20

12

72

adult

child

40-6

34

passed

40

72-32

failed

6

(Total for Question 12 is 3 marks)

13 Fay is planning a trip to a theme park for 1 adult and 2 children.

These are the costs for the trip.

Total cost of petrol	£23	
Tickets to theme park	£33 each adult	£24.50 each child
Meals	£15 each adult	£10 each child

Fay has £200 to spend. She pays all the costs.

How much money does she have left?

33
24.50
24.50
―――
82.00
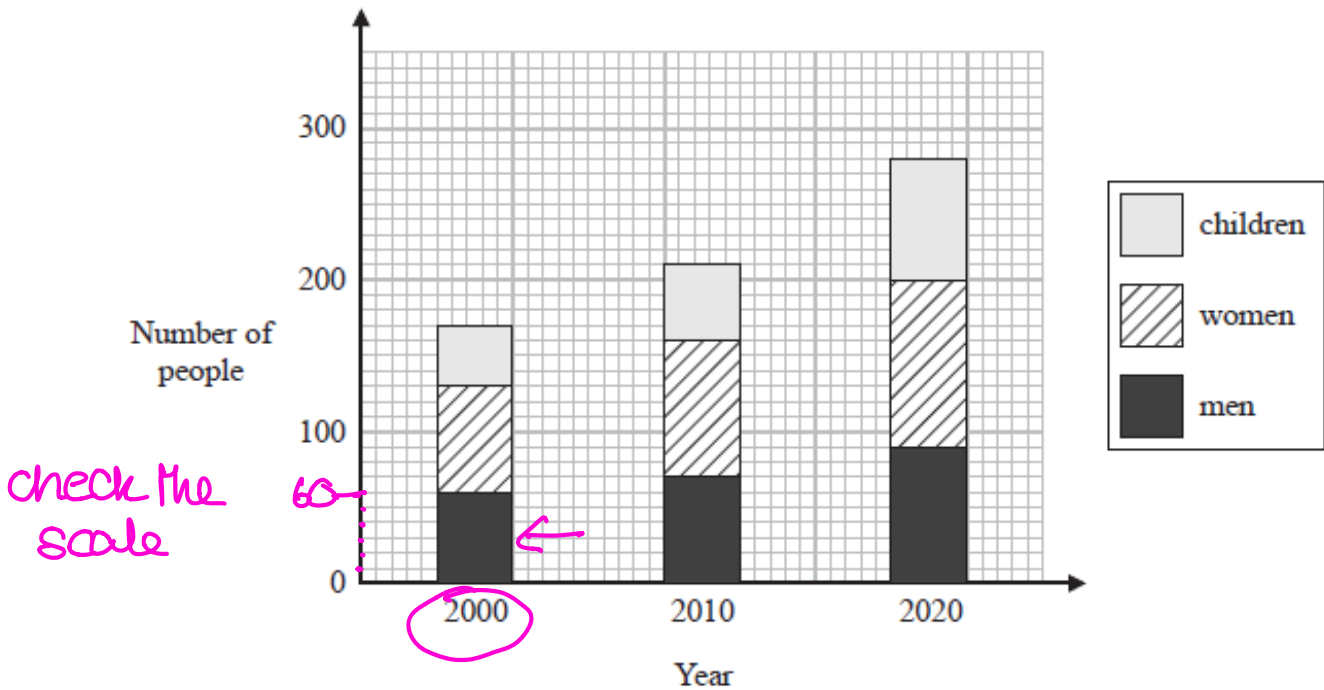
SPENDS Petrol = 23

Tickets = 33 + 24.50 + 24.50 = £82

Meals = 15 + 10 + 10 = 35

Total = 23 + 82 + 35 = 140

Left 200 - 140 = 60

£ 60

(Total for Question 13 is 4 marks)

14 The composite bar chart shows information about the number of people living in a village.

[handwritten annotation: check the scale, 60, arrow, circled 2000]

Write down the number of men living in the village in the year 2000

.......................60.......................

(Total for Question 14 is 1 mark)

15 Write down the value of the 6 in the number 16 007

.......................6 000.......................

(Total for Question 15 is 1 mark)

16 Write down a factor of 60 that is between 8 and 14

*[handwritten working:
1, 60   4, 15
2, 30   5, 12
3, 20   6, 10]*

.......................10 or 12.......................

(Total for Question 16 is 1 mark)

17 Write 0.3 as a fraction.

[handwritten working: 0.1 = $\frac{1}{10}$ so   0.3 = $\frac{3}{10}$]

.......................$\frac{3}{10}$.......................

or equivalent **(Total for Question 17 is 1 mark)**

18 Simplify $e + e + e + e$

(not e^4)

.... 4e ....

(Total for Question 18 is 1 mark)

19 Simplify $3 \times w \times 5 \times t$

$3 \times 5 \times w \times t$

.... 15wt (or 15tw)

(Total for Question 19 is 1 mark)

20 Change 40 centimetres into millimetres.

1 cm = 10 mm
40 cm = 400 $\rangle \times 40$

.... 400 .... millimetres

(Total for Question 20 is 1 mark)

21 Here is a list of 8 letters.

    B   C   A   A   A   A   B   A

Find the probability that this letter will be C.

$$\frac{1}{8}$$

(Total for Question 21 is 1 mark)

TOTAL FOR PAPER IS 30 MARKS