

WEEK 2 TASKS

Make sure you check your answers and show all your working out. Try to make your work is well laid out and easy to read – if the examiner cannot understand what you have written they cannot award you any marks.

Have we said, “Show your working out”?

WEEK 2 TASK 1

One Marker Starters

Includes Summer 2017 – Summer 2024 Exam Papers



(Unless otherwise stated)



Pearson

1

Simplify $m^3 + m^3$

6

Write 19.4949 correct to the nearest whole number

2

Write down the value of the 2 in the number
12 345

7

Work out the square root of 81

3

Complete the statement below to make it correct

..... $\times m = 2m$

8

Simplify $3 \times a \times 4$

4

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

9

Here are four digits:
4 7 6 3

Write down the smallest 4-digit even number that can be made using each number only once

5

What is the time 2 hours 40 minutes after 8.05 am?

10

Change 40 centimetres into millimetres



WEEK 2 TASK 2

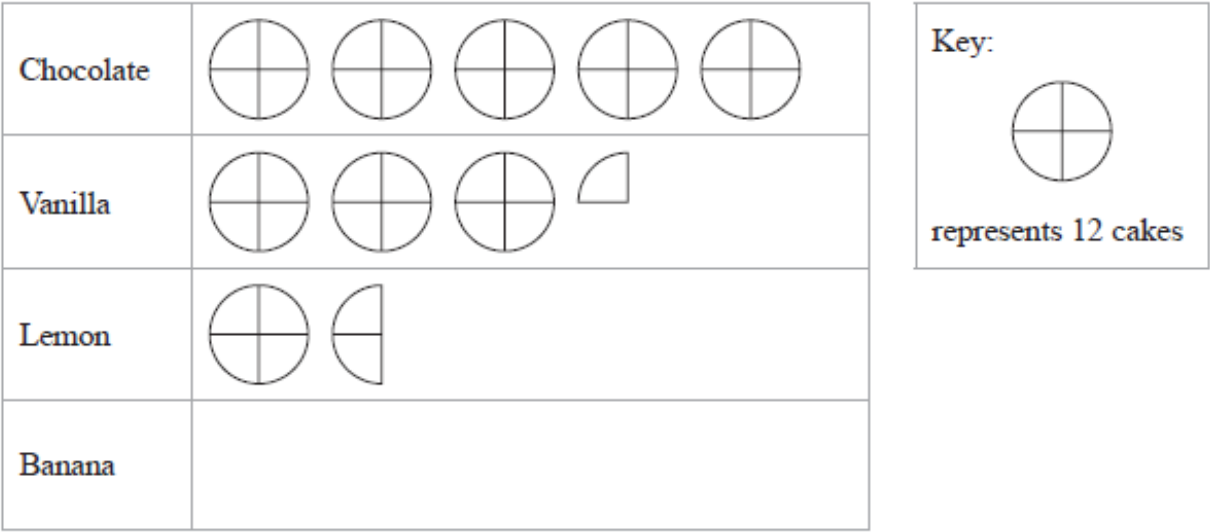
Estimated completion time = 30 minutes.

Answer all questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 The pictogram shows information about the number of chocolate cakes, vanilla cakes and lemon cakes sold by Year 7 at a school fair.



24 banana cakes were sold by Year 7

(a) Use this information to complete the pictogram.

(1)

At the fair, Year 8 sold a total of 150 cakes.

(b) Which Year sold most cakes at the fair, Year 7 or Year 8?

You must show how you get your answer.

(3)

(Total for Question 1 is 4 marks)

- 2 7 -5 3 9 -2

Write these numbers in order of size.

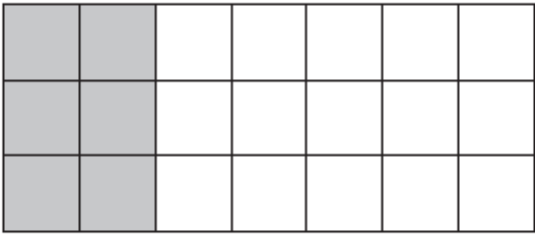
Start with the smallest number.

.....
(Total for Question 2 is 1 mark)

- 3 Write 35% as a decimal.

.....
(Total for Question 3 is 1 mark)

4 Here is a grid of squares.



What fraction of the grid is shaded?

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

5 Write the number three thousand one hundred and seven in figures.

.....
(Total for Question 5 is 1 mark)

6 Here are the first four terms of a number sequence.

97 91 85 79

(a) Explain how to work out the next number of the sequence.

.....
(1)

(b) Work out the difference between the 5th term and the 7th term of the sequence.

.....
(2)
(Total for Question 6 is 3 marks)

7 Gabriel thinks of a number.
He multiplies his number by 5 and then adds 7
His answer is 72

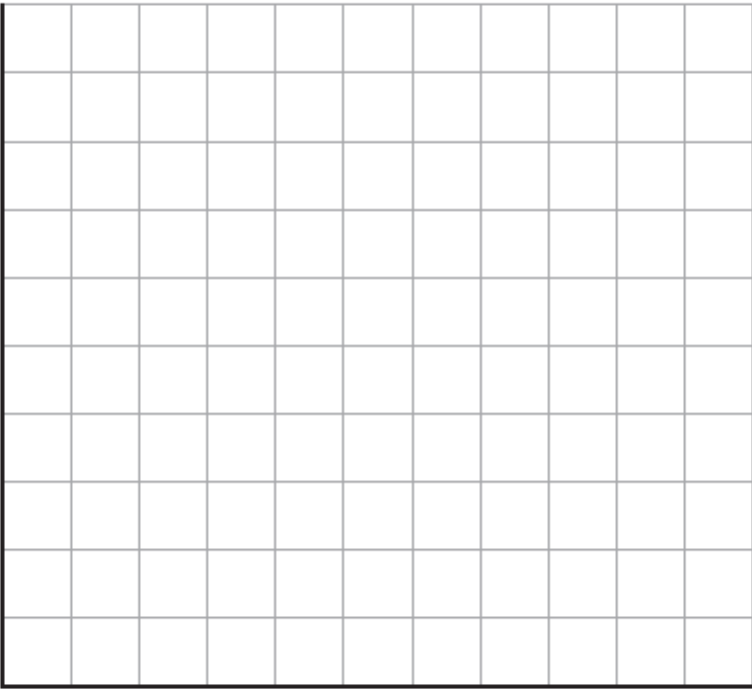
What number did Gabriel think of?

.....
(Total for Question 7 is 3 marks)

8 The table shows the number of books read by four people in one month.

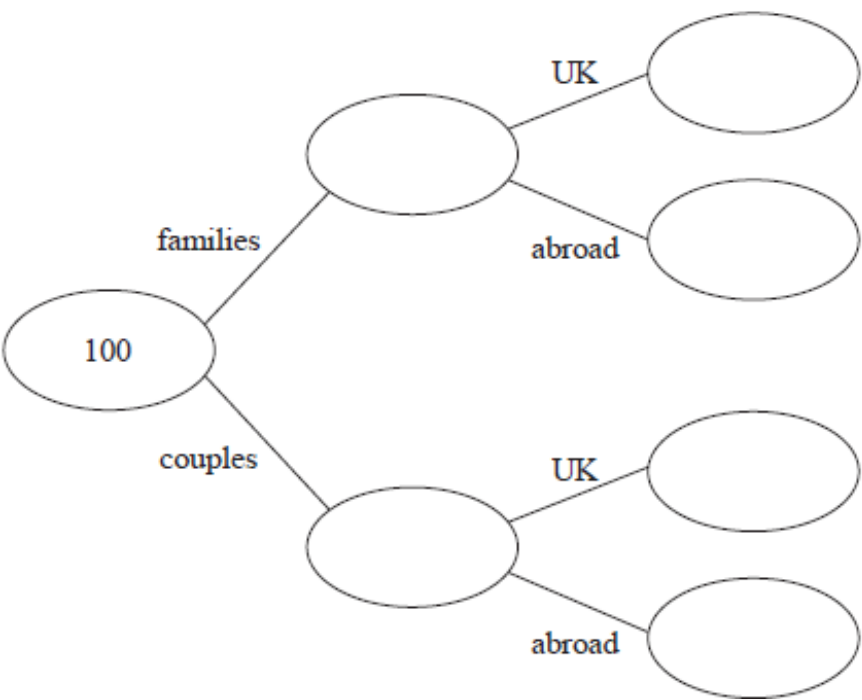
Person	Number of books
Ximena	7
Martha	9
Kezia	1
Tabby	5

On the grid, draw a bar chart to show the information in the table.



(Total for Question 8 is 3 marks)

- 9 A travel agent sold 100 holidays in April.
 Each of these holidays was in the UK or was abroad.
 64 of the 100 holidays were sold to families.
 The rest of the holidays were sold to couples.
 11 of the 18 holidays abroad were sold to couples.
 Use this information to complete the frequency tree.



(Total for Question 9 is 3 marks)

- 10 Write $\frac{3}{10}$ as a percentage.

.....%
 (Total for Question 10 is 1 mark)

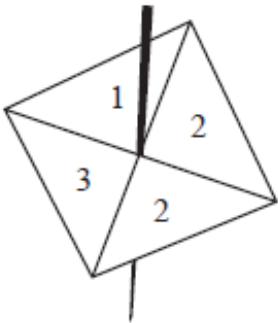
- 11 Simplify $m + m + m + m$

.....
 (Total for Question 11 is 1 mark)

- 12 Write down a number that is less than -5

.....
 (Total for Question 12 is 1 mark)

13 Here is a 4-sided spinner.



Samina spins the spinner once.
Choose the word that best describes the probability that the spinner lands on a number less than 4

impossible	unlikely	evens	likely	certain
------------	----------	-------	--------	---------

.....
(Total for Question 13 is 1 mark)

14 Wayne begins walking at 8 30 am.
He walks for 1 hour and 45 minutes.
Wayne then rests for 15 minutes.
He then walks for 85 minutes to a cafe.
Does Wayne get to the cafe before 12 noon?
You must show how you get your answer.

(Total for Question 14 is 4 marks)

- 15** There are only red counters, blue counters and green counters in a bag.
number of red counters : number of blue counters : number of green counters = 2 : 16 : 7
What fraction of the counters in the bag are green counters?

.....
(Total for Question 15 is 2 marks)

TOTAL FOR PAPER IS 30 MARKS

WEEK 2 TASK 3

One Marker Starters

Includes Summer 2017 – Summer 2024 Exam Papers



(Unless otherwise stated)

1

Write 0.73 as a percentage

6

Change 0.32 kilograms
to grams

2

Work out: $3 \times 5 + 7$

7

Write $\frac{9}{10}$ as a decimal

3

Write 80% as a fraction

8

Write 1.59 correct to
1 decimal place

4

Write the following numbers in order of
size. Start with the smallest number

-6 6 -5 0 12

9

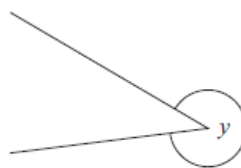
Simplify $3f \times 5g$

5

Write down a square
number that is between
10 and 50

10

Write down the mathematical name for
the type of angle marked y





WEEK 2 TASK 4

Estimated completion time = 30 minutes.

Answer all questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1** Max sees this special offer in a shop.

Buy one large plate and get one small plate for half the normal price.

The normal price of a large plate is £2

The normal price of a small plate is 80p

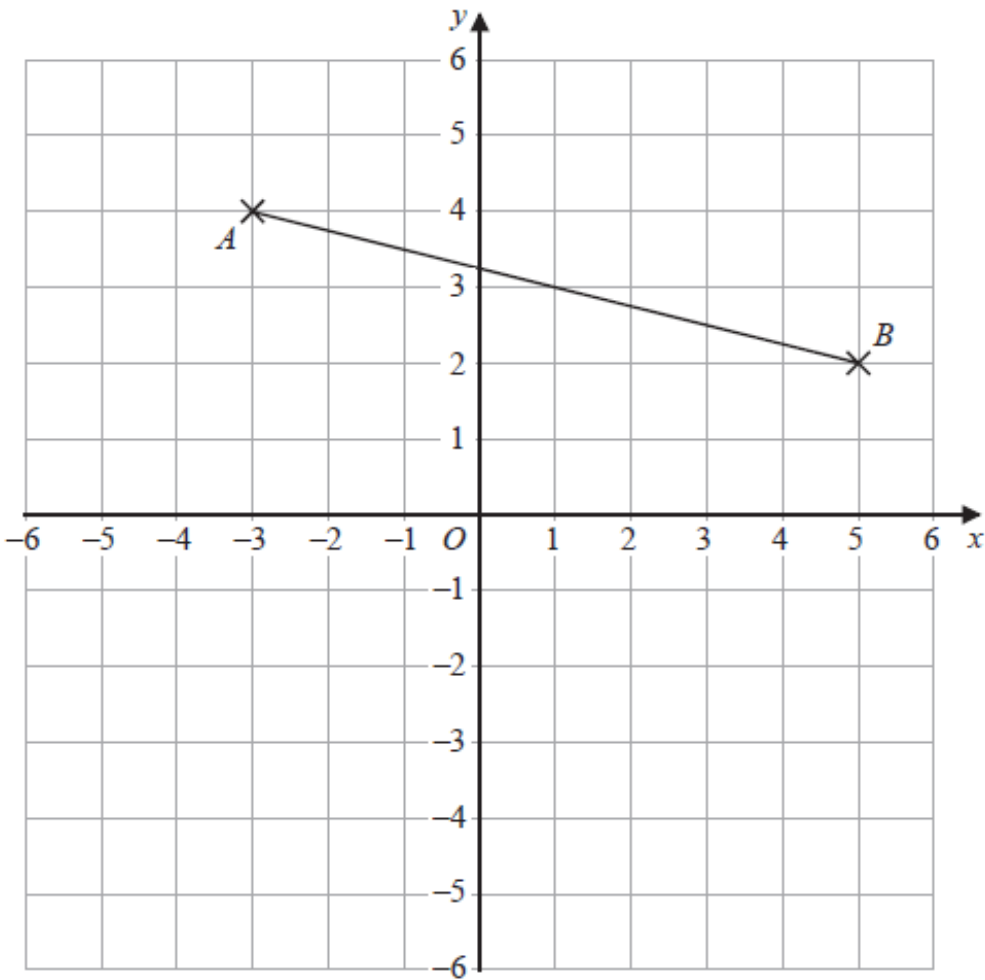
Max wants to buy 6 large plates and 6 small plates using this offer.

He has £15

Has Max got enough money?

You must show how you get your answer.

(Total for Question 1 is 4 marks)



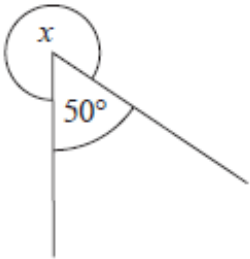
Write down the coordinates of the midpoint of AB .
(..... ,)
(Total for Question 2 is 1 mark)

- 3 There are 3 litres of oil in a can.
Jermaine uses 700 millilitres of the oil.

Work out the amount of oil left in the can.
Give your answer in millilitres.

..... millilitres
(Total for Question 3 is 3 marks)

4 (a) Work out the size of the angle marked x .



.....°
(2)

A student says that an angle of 50° is an obtuse angle.
The student is wrong.

(b) Explain why.

.....
.....
(1)

(Total for Question 4 is 3 marks)

5 Work out $\frac{1}{5}$ of 300

.....
(Total for Question 5 is 1 mark)

6 Selina has a bag of 22 counters.

5 of the counters are blue.

9 of the counters are red.

8 of the counters are pink.

Selina takes at random a counter from the bag.

Write down the probability that Selina does **not** take a pink counter,

.....
(Total for Question 6 is 1 mark)

7 Here is a list of numbers.

2 4 4 7 8

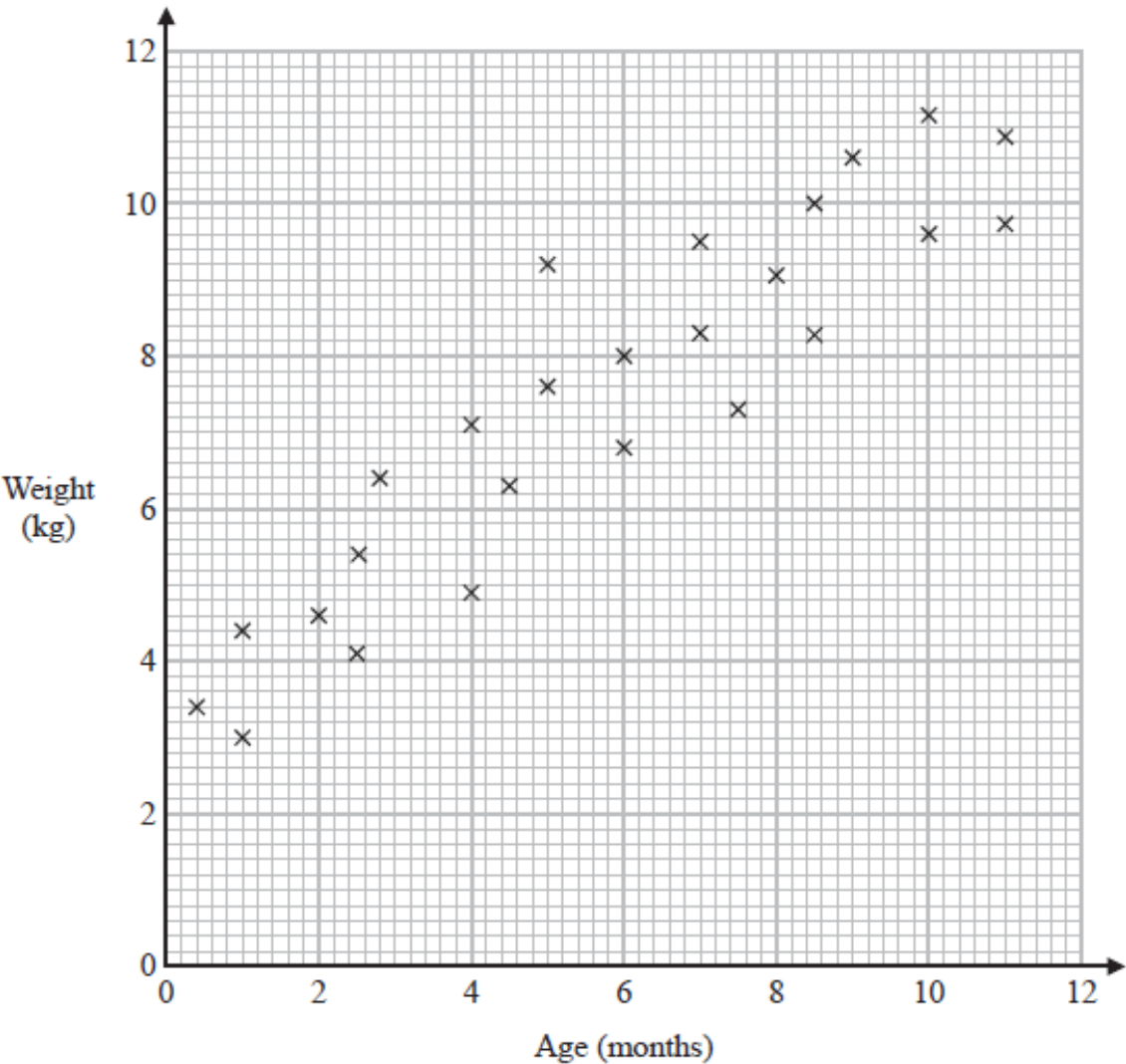
Work out the range of these numbers.

.....
(Total for Question 7 is 1 mark)

8 Simplify $\frac{15a}{3}$

.....
(Total for Question 8 is 1 mark)

*9 The scatter graph shows information about the ages and weights of some babies.



(a) Describe the relationship between the age and the weight of the babies.

.....

.....

.....

(1)

Another baby has a weight of 5.8 kg

(b) Using the scatter graph, find an estimate for the age of this baby.

..... months

(2)

(Total for Question 9 is 3 marks)

10 Matt is drawing a scale diagram.
1 cm represents 5 m.
The real distance between two points is 20 m.
What is the distance between the two points on the scale diagram?

..... cm
(Total for Question 10 is 1 mark)

11 Here are 6 numbers.

13 5 4 9 3 8

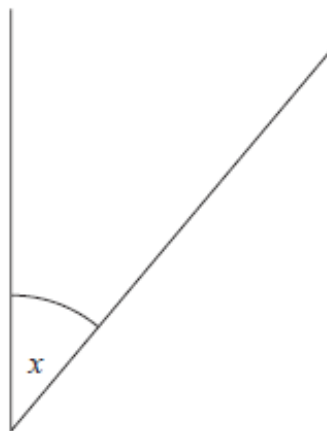
Work out the mean.

.....
(Total for Question 11 is 2 marks)

12 Shah takes an exam.
The exam is out of 60 marks.
Shah needs to score at least 70% of the marks to pass the exam.
He scores 45 marks.
Show that Shah passes the exam.

(Total for Question 12 is 2 marks)

13 Measure the size of the angle marked x .

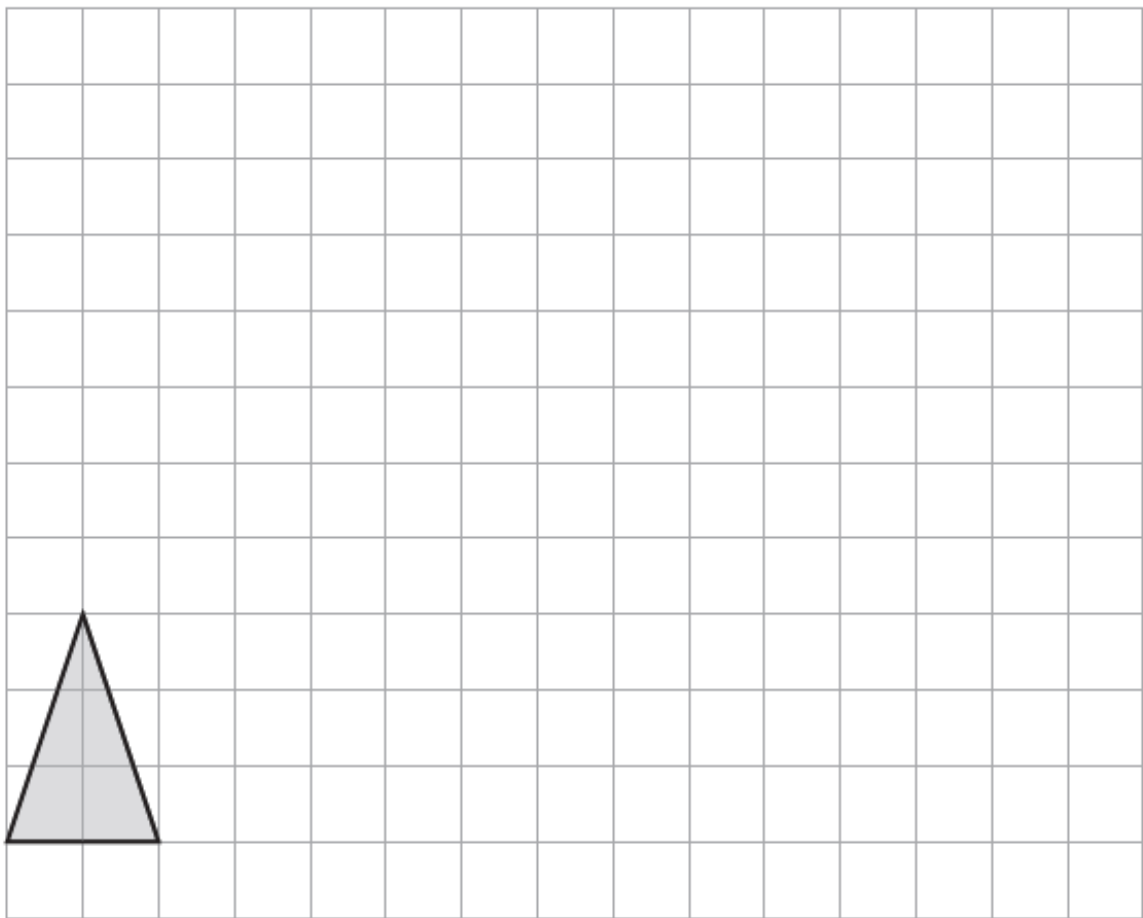


.....°
(Total for Question 13 is 1 mark)

14 There are 200 counters in a bag.
38 counters are red.
52 counters are blue.
The rest of the counters are yellow or green.
There are the same number of yellow counters as green counters.
What percentage of the counters in the bag are yellow?

.....%
(Total for Question 14 is 4 marks)

15



On the grid, draw an enlargement of the triangle with a scale factor of 3

(Total for Question 15 is 2 marks)

TOTAL FOR PAPER IS 30 MARKS

WEEK 2 TASK 5

One Marker Starters

Includes Summer 2017 – Summer 2024 Exam Papers



(Unless otherwise stated)

1

Write down a 6 digit number that has 4 as its thousands digit.
You can only use the digit 4 once

6

Write 72.88 correct to 1 significant figure

2

Change 565 cm into metres

7

Work out 2^3

3

Write down a square number that is also an odd number

8

Write down the value of the 4 in the number 542.3

4

Write 3% as a fraction

9

Simplify $m + m + m + m$

5

Here are the first 4 terms of a sequence

-1 4 9 14

Write down the next term and explain how you got your answer

10

Write down the name of this 3-D shape



MARKSCHEMES

WEEK 2 TASK 1

One Marker Starters

Includes Summer 2017 – Summer 2024 Exam Papers



(Unless otherwise stated)



Pearson

1

Simplify $m^3 + m^3$
 $2m^3$

6

Write 19.4949 correct to the nearest whole number

19

2

Write down the value of the 2 in the number
12 345

2000

7

Work out the square root of 81

9

3

Complete the statement below to make it correct

....2... $\times m = 2m$

8

Simplify $3 \times a \times 4$

$12a$

4

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

10 or 12

9

Here are four digits:
4 7 6 3

Write down the smallest 4-digit even number that can be made using each number only once

3476

5

What is the time 2 hours 40 minutes after 8.05 am?

10.45 am

10

Change 40 centimetres into millimetres

400 mm

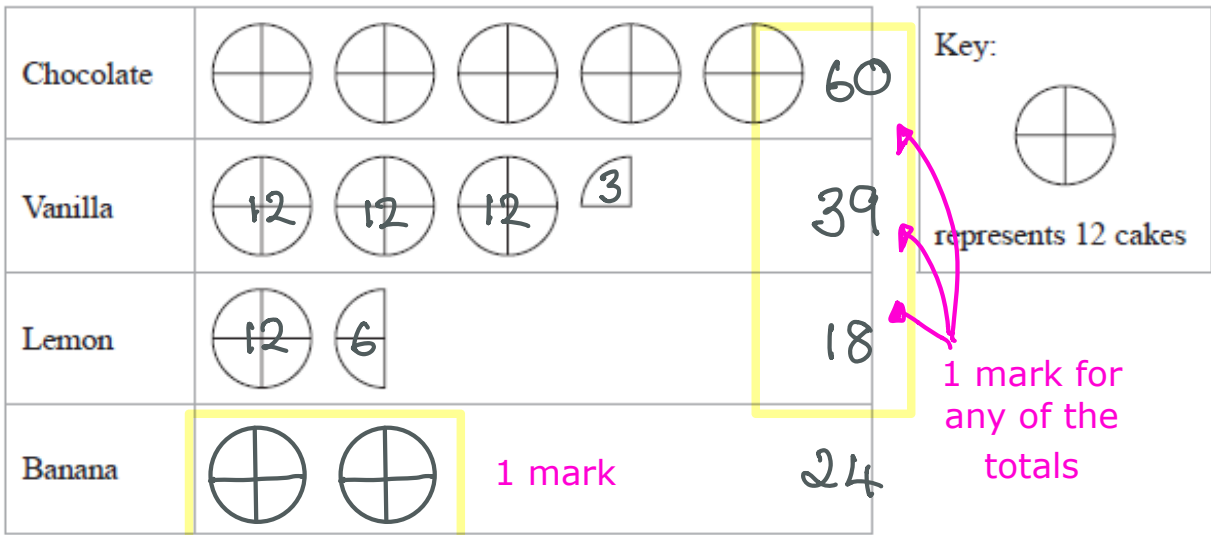
WEEK 2 TASK 2

Answer all questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 The pictogram shows information about the number of chocolate cakes, vanilla cakes and lemon cakes sold by Year 7 at a school fair.



24 banana cakes were sold by Year 7

(a) Use this information to complete the pictogram.

(1)

At the fair, Year 8 sold a total of 150 cakes.

(b) Which Year sold most cakes at the fair, Year 7 or Year 8?

You must show how you get your answer.

$$60 + 39 + 18 + 24 = 141$$

1 mark

Final mark Year 8 sold the most

(3)

Must be supported by correct working

(Total for Question 1 is 4 marks)

2 7 -5 3 9 -2

Write these numbers in order of size.

Start with the smallest number.

1 mark -5 -2 3 7 9

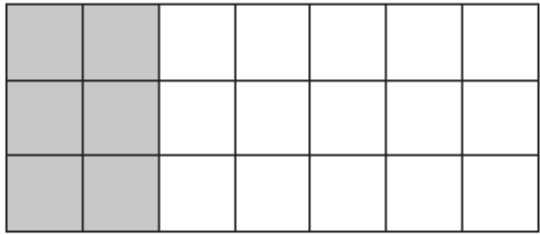
(Total for Question 2 is 1 mark)

3 Write 35% as a decimal.

0.35 1 mark

(Total for Question 3 is 1 mark)

4 Here is a grid of squares.



What fraction of the grid is shaded?

$\frac{6}{21}$
(Total for Question 4 is 1 mark)

Or equivalent fraction
(decimals or
percentages not
allowed)
1 mark

5 Write the number three thousand one hundred and seven in figures.

3107
(Total for Question 5 is 1 mark)

6 Here are the first four terms of a number sequence.

97 91 85 79

(a) Explain how to work out the next number of the sequence.

subtract 6 from the previous term
(1)

(b) Work out the difference between the 5th term and the 7th term of the sequence.

1 2 3 4 5 6 7
97 91 85 79 73 67 61

73 - 61 1 mark 12 Final mark
(2)

(Total for Question 6 is 3 marks)

7 Gabriel thinks of a number.

He multiplies his number by 5 and then adds 7

His answer is 72

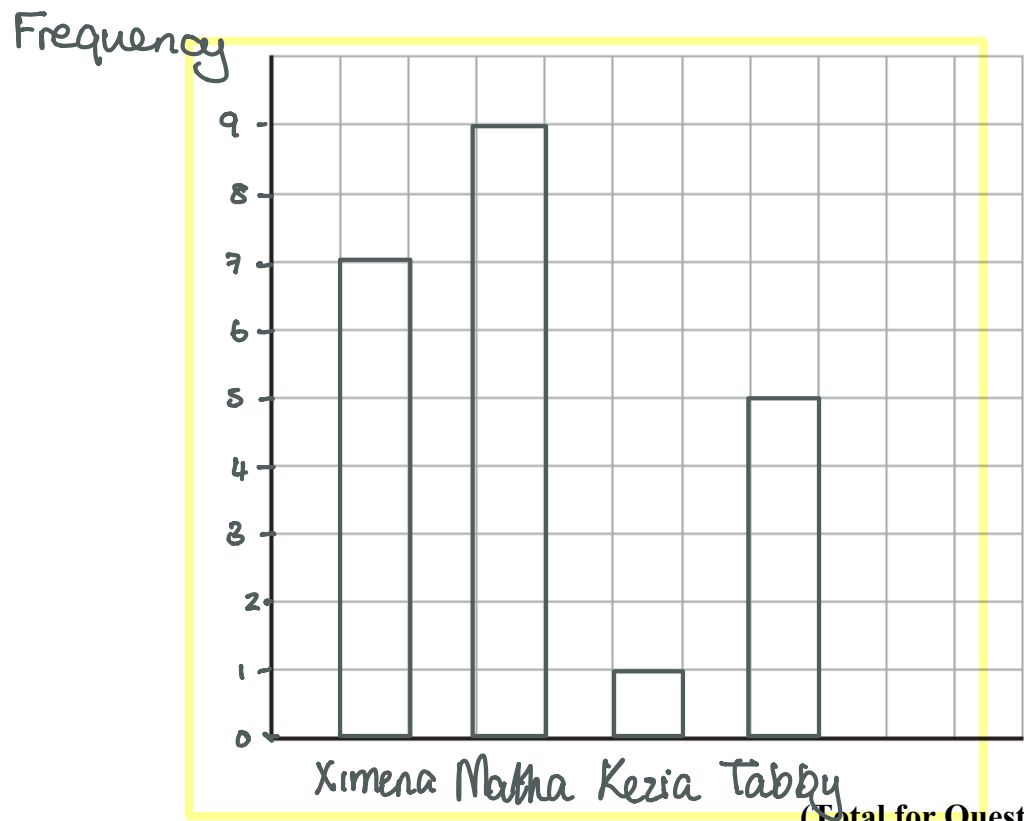
What number did Gabriel think of?

1 mark ? x 5 + 7
68 ÷ 5 72 - 7 = 65 1 mark 13 Final mark
= 13
(Total for Question 7 is 3 marks)

8 The table shows the number of books read by four people in one month.

Person	Number of books
Ximena	7
Martha	9
Kezia	1
Tabby	5

On the grid, draw a bar chart to show the information in the table.



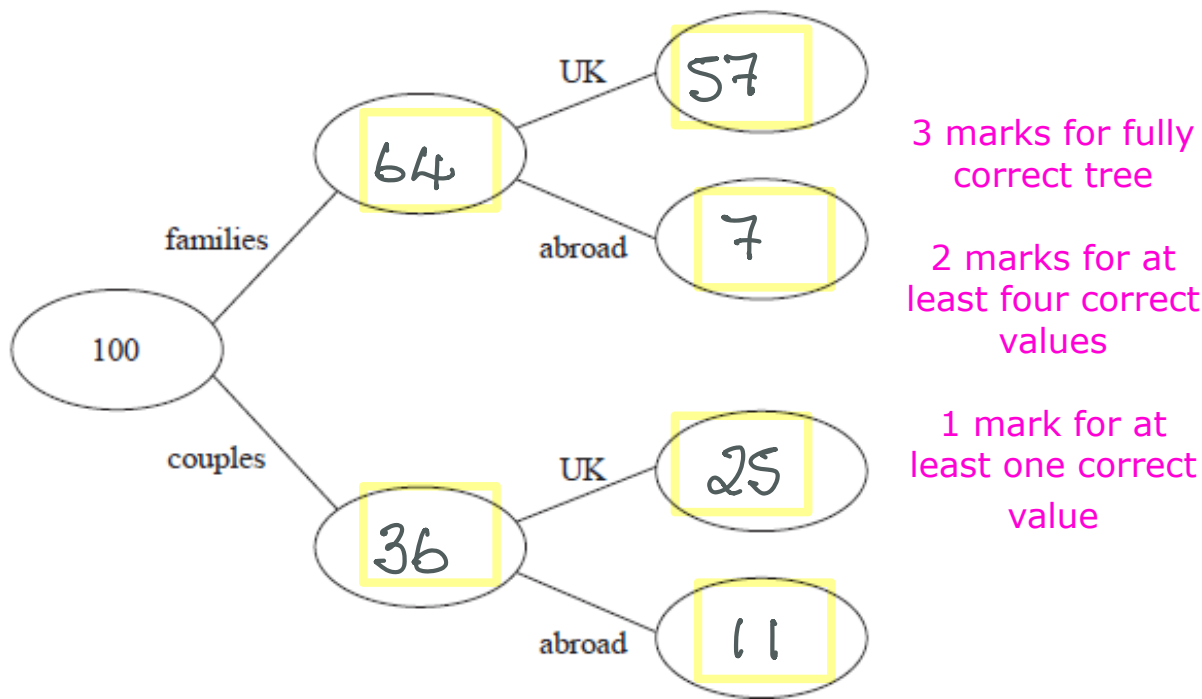
3 marks for fully correct bar chart

Or 1 mark for correct scale or name labels

Or 1 mark for at least two correct bars

(Total for Question 8 is 3 marks)

- 9 A travel agent sold 100 holidays in April.
 Each of these holidays was in the UK or was abroad.
 64 of the 100 holidays were sold to families.
 The rest of the holidays were sold to couples.
 11 of the 18 holidays abroad were sold to couples.
 Use this information to complete the frequency tree.



(Total for Question 9 is 3 marks)

- 10 Write $\frac{3}{10}$ as a percentage.

30 1 mark

.....%

(Total for Question 10 is 1 mark)

- 11 Simplify $m + m + m + m$

4m 1 mark

.....

(Total for Question 11 is 1 mark)

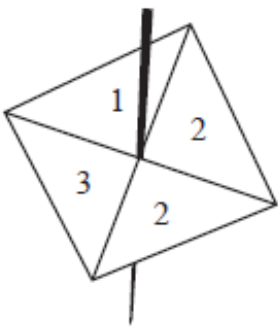
- 12 Write down a number that is less than -5

for example -6 1 mark for a valid number less than -5

.....

(Total for Question 12 is 1 mark)

13 Here is a 4-sided spinner.



Samina spins the spinner once.
Choose the word that best describes the probability that the spinner lands on a number less than 4

impossible	unlikely	evens	likely	<u>certain</u>
------------	----------	-------	--------	----------------

certain 1 mark

(Total for Question 13 is 1 mark)

14 Wayne begins walking at 8 30 am.
He walks for 1 hour and 45 minutes.
Wayne then rests for 15 minutes.
He then walks for 85 minutes to a cafe.
Does Wayne get to the cafe before 12 noon?
You must show how you get your answer.

Begins 8:30
Walks 1hr 45 => 105 mins 1 mark
Rests = 15 mins
Walks = 85 mins
205 mins. 1 mark

205 mins = 3 hours 25 mins

8:30 + 3hr 25 mins => 11:55am 1 mark

YES he arrives before 12 noon

Final mark
Must be supported by correct working
(Total for Question 14 is 4 marks)

15 There are only red counters, blue counters and green counters in a bag.
number of red counters : number of blue counters : number of green counters = 2 : 16 : 7
What fraction of the counters in the bag are green counters?

R	:	B	:	G	Total
2	:	16	:	7	25

$$\frac{7}{25}$$

2 marks

(Total for Question 15 is 2 marks)

TOTAL FOR PAPER IS 30 MARKS

WEEK 2 TASK 3

One Marker Starters

Includes Summer 2017 – Summer 2024 Exam Papers



(Unless otherwise stated)



Pearson

1

Write 0.73 as a percentage

73%

6

Change 0.32 kilograms
to grams

320 grams

2

Work out: $3 \times 5 + 7$

22

7

Write $\frac{9}{10}$ as a decimal

0.9

3

Write 80% as a fraction

$\frac{80}{100}$

or equivalent

8

Write 1.59 correct to
1 decimal place

1.6

4

Write the following numbers in order of
size. Start with the smallest number

-6 6 -5 0 12

-6 -5 0 6 12

9

Simplify $3f \times 5g$

15fg

5

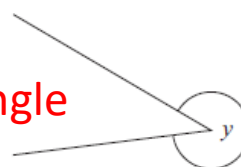
Write down a square
number that is between
10 and 50

16, 25, 36 or 49

10

Write down the mathematical name for
the type of angle marked y

Reflex angle



WEEK 2 TASK 4

Answer all questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 Max sees this special offer in a shop.

Buy one large plate and get one small plate for half the normal price.

The normal price of a large plate is £2

The normal price of a small plate is 80p

Max wants to buy 6 large plates and 6 small plates using this offer.

He has £15

Has Max got enough money?

You must show how you get your answer.

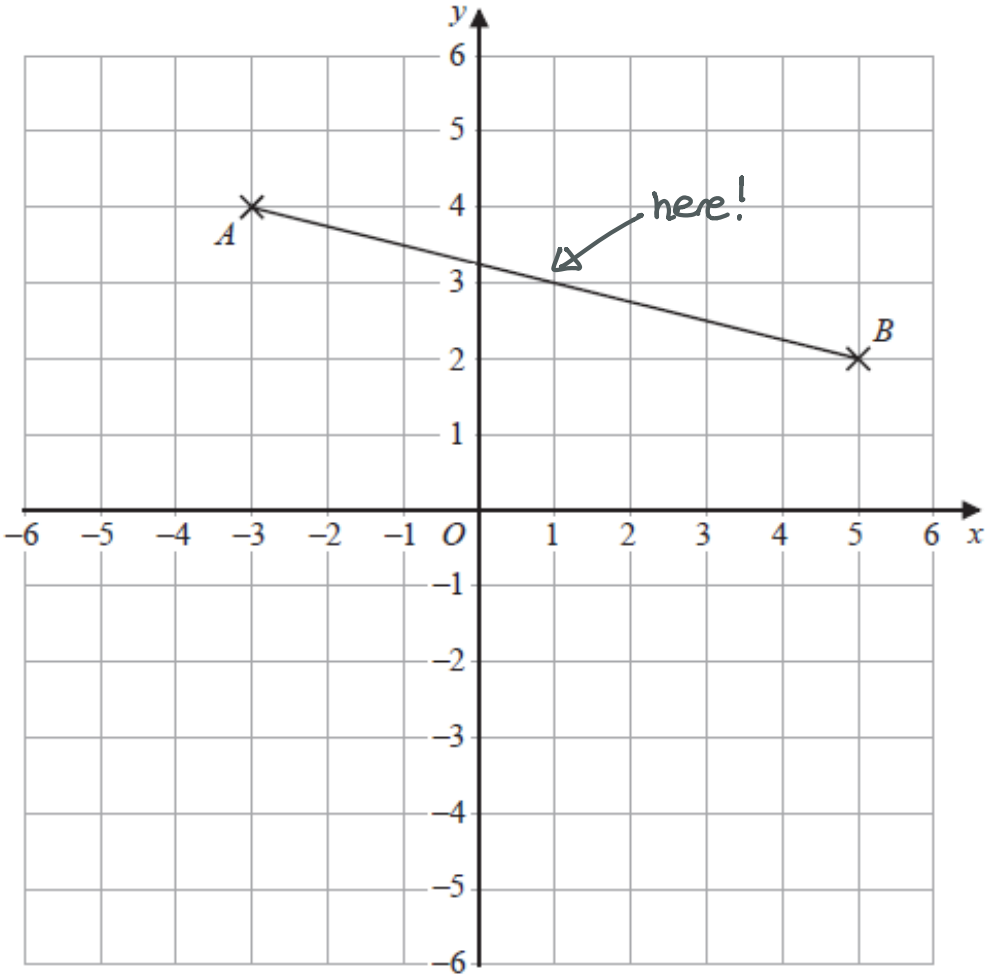
$$\begin{aligned} 6 \text{ large plates} &= £2 \times 6 = £12 && 1 \text{ mark} \\ 6 \text{ small plates} &= 6 \times 40\text{p} = £2.40 && 1 \text{ mark} \\ \text{Total} &= 12 + 2.40 = £14.40 && 1 \text{ mark} \\ \text{Max} &\text{ has enough money } 14.40 < 15 \end{aligned}$$

(Total for Question 1 is 4 marks)

Final mark

Must be supported by correct working

2



Write down the coordinates of the midpoint of AB .

(1, 3 1 mark)
(Total for Question 2 is 1 mark)

- 3 There are 3 litres of oil in a can.
Jermaine uses 700 millilitres of the oil.

Work out the amount of oil left in the can.
Give your answer in millilitres.

1 litre = 1000 ml

3 litres = 3000 ml 1 mark

3000 - 700 = 2300

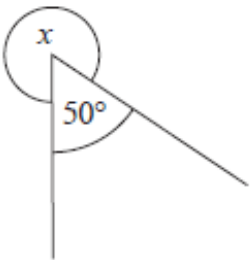
1 mark

Final mark
..... 2300 millilitres
(Total for Question 3 is 3 marks)

4 (a) Work out the size of the angle marked x .

$360 - 50$

1 mark



310

Final mark.

(2)

A student says that an angle of 50° is an obtuse angle.

The student is wrong.

(b) Explain why.

1 mark

50° would be an acute angle not obtuse

(1)

(Total for Question 4 is 3 marks)

5 Work out $\frac{1}{5}$ of 300

$300 \div 5$

60

1 mark

(Total for Question 5 is 1 mark)

6 Selina has a bag of 22 counters.

5 of the counters are blue.

9 of the counters are red.

8 of the counters are pink.

Selina takes at random a counter from the bag.

Write down the probability that Selina does **not** take a pink counter,

B	R	P	Total
5	9	8	22

$\frac{14}{22}$

1 mark

(Total for Question 6 is 1 mark)

or equivalent fraction

7 Here is a list of numbers.

2 4 4 7 8

Work out the range of these numbers.

$8 - 2$

6

 1 mark

(Total for Question 7 is 1 mark)

8 Simplify $\frac{15a}{3}$

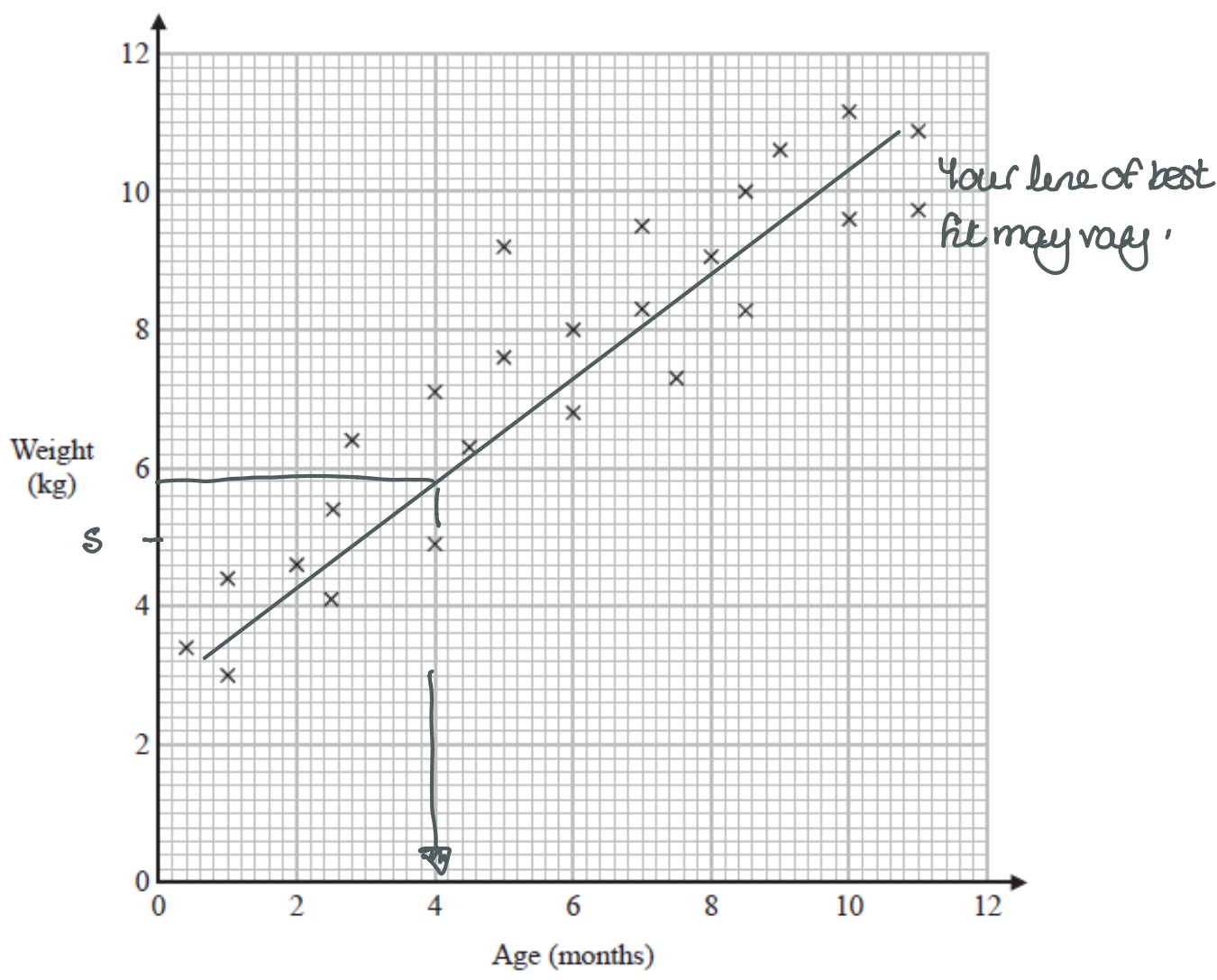
$15 \div 3 = 5$

5a

 1 mark

(Total for Question 8 is 1 mark)

*9 The scatter graph shows information about the ages and weights of some babies.



(a) Describe the relationship between the age and the weight of the babies.

its a positive correlation so as the baby gets older the more it weighs

1 mark

(1)

Another baby has a weight of 5.8 kg

(b) Using the scatter graph, find an estimate for the age of this baby.

a range is allowed
between 2.5 to 4.5

2 marks

4

months

(2)

(Total for Question 9 is 3 marks)

- 10 Matt is drawing a scale diagram.
 1 cm represents 5 m.
 The real distance between two points is 20 m.
 What is the distance between the two points on the scale diagram?

$$\begin{array}{l} 1\text{cm} = 5\text{m} \\ \times 4 \\ \hline = 4\text{cm} \end{array} \qquad \begin{array}{l} 20\text{m} \downarrow \times 4 \end{array}$$

1 mark

4

..... cm

(Total for Question 10 is 1 mark)

- 11 Here are 6 numbers.

13 5 4 9 3 8

Work out the mean.

$$13 + 5 + 4 + 9 + 3 + 8 = 42$$

1 mark

$$42 \div 6 = 7$$

7

Final mark

(Total for Question 11 is 2 marks)

- 12 Shah takes an exam.
 The exam is out of 60 marks.
 Shah needs to score at least 70% of the marks to pass the exam.
 He scores 45 marks.
 Show that Shah passes the exam.

needs

70% of 60

$$70\% = 0.7$$

$$0.7 \times 60 =$$

42

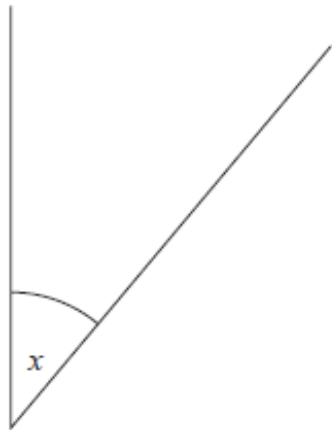
Final mark

1 mark

Shah passes because 45 > 42

(Total for Question 12 is 2 marks)

13 Measure the size of the angle marked x .



(range 38 to 42 accepted)

40

1 mark

(Total for Question 13 is 1 mark)

14 There are 200 counters in a bag.

38 counters are red.

52 counters are blue.

The rest of the counters are yellow or green.

There are the same number of yellow counters as green counters.

What percentage of the counters in the bag are yellow?



$$\begin{array}{r} 200 - 90 \\ = 110 \end{array}$$
$$\begin{array}{r} 110 \div 2 = 55 \\ 55 \qquad 55 \end{array}$$

1 mark

1 mark

%age yellow $\frac{55}{200} \times 100$

$$= 27.5$$

1 mark

Final mark

27.5

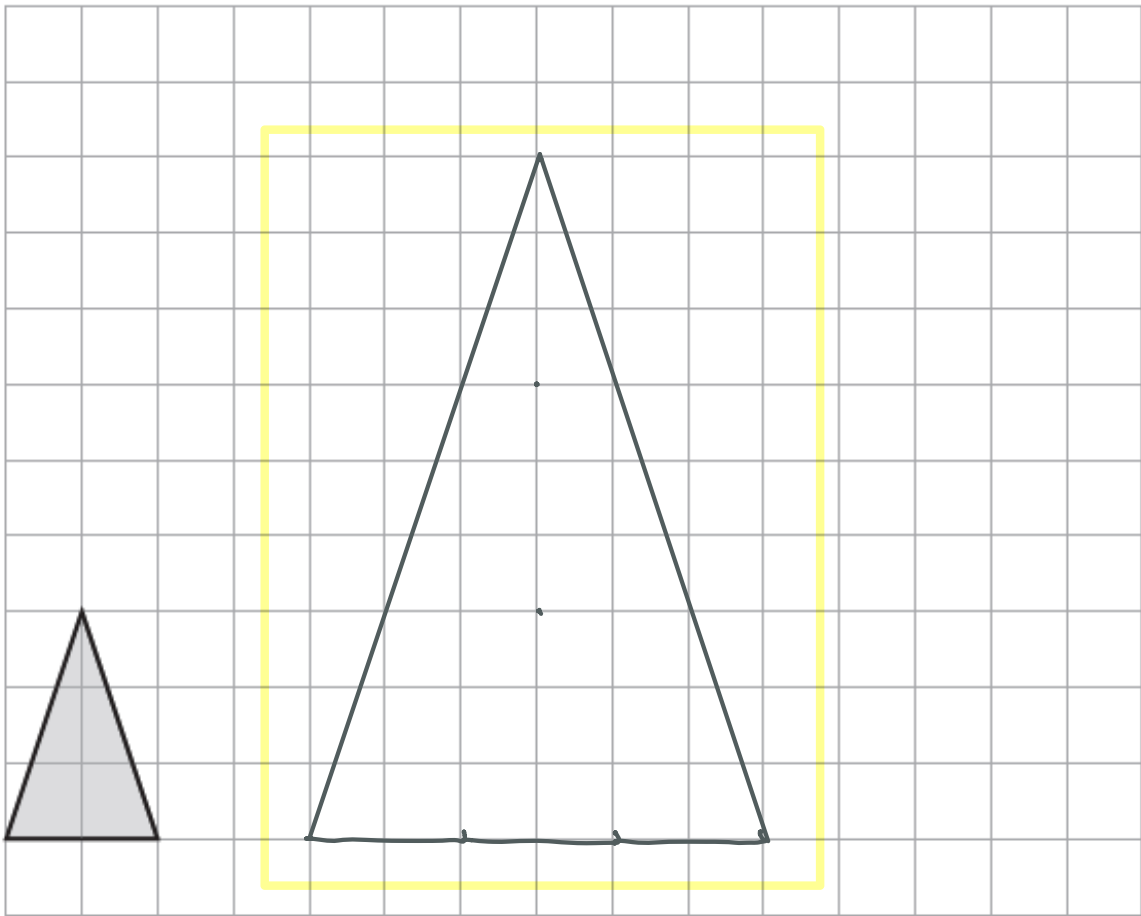
%

(Total for Question 14 is 4 marks)

$$\begin{array}{r} 27.5 \\ 2 \overline{) 55.0} \end{array}$$

2 marks if fully correct shape drawn

15 1 mark for correct base length or correct height if two marks not awarded



On the grid, draw an enlargement of the triangle with a scale factor of 3

(Total for Question 15 is 2 marks)

TOTAL FOR PAPER IS 30 MARKS

WEEK 2 TASK 5

One Marker Starters

Includes Summer 2017 – Summer 2024 Exam Papers



(Unless otherwise stated)

1

Write down a 6 digit number that has 4 as its thousands digit.

You can only use the digit 4 once

e.g. 104 000

6

Write 72.88 correct to 1 significant figure

70

2

Change 565 cm into metres

5.65 metres

7

Work out 2^3

8

3

Write down a square number that is also an odd number

e.g. 1, 9, 25 etc.

8

Write down the value of the 4 in the number 542.3

40

4

Write 3% as a fraction

$\frac{3}{100}$

or equivalent

9

Simplify $m + m + m + m$

4m

5

Here are the first 4 terms of a sequence

-1 4 9 14

Write down the next term and explain how you got your answer

19

Add 5 to each term

10

Write down the name of this 3-D shape



Cone