

Answer ALL TWENTY FIVE questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 Nav found the following table that shows the age, in years, of each of seven cities.

City	Age (years)
Cadiz	3124
Suzhou	2534
Jenin	4469
Istanbul	2704
Nanjing	2516
Gaziantep	5669
Alexandria	2351

- (a) Write down the name of the city with the greatest age.

.....  
(1)

- (b) Write the number 2534 in words.

.....  
(1)

- (c) Write the number 2351 correct to the nearest ten.

.....  
(1)

- (d) Work out the difference between the age of Cadiz and the age of Nanjing.

..... years  
(1)

A millennium is 1000 years.

- (e) What is the age of Jenin in whole millenniums?

..... millenniums  
(1)

(Total for Question 1 is 5 marks)



2 (a) Simplify  $12a + 3a - 7a$

.....  
(1)

(b) Simplify  $8 \times 3b$

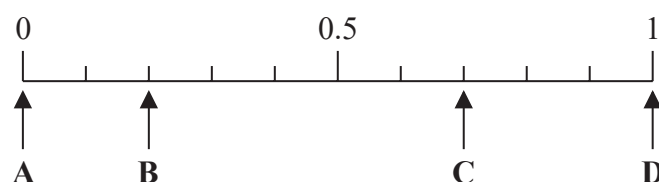
.....  
(1)

(c) Solve  $\frac{c}{3} = 9$

$c =$  .....  
(1)

(Total for Question 2 is 3 marks)

3 Here is a probability scale.



In a fruit bowl, there are only

- 3 bananas
- 7 pears

Shimon is going to take at random one of the fruits from the bowl.

(a) Write down the letter of the arrow that points to the probability that Shimon takes

(i) a pear,

.....  
(1)

(ii) a grape.

.....  
(1)

Emma has some carrots, some potatoes and some onions in a bag.

She says that the probability of taking at random a carrot from the bag is 1.4

Emma is not correct.

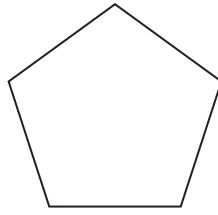
(b) Explain why.

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

(Total for Question 3 is 3 marks)



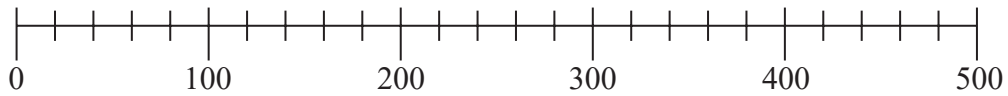
4 Here is a polygon.



(a) Write down the mathematical name of this polygon.

.....  
(1)

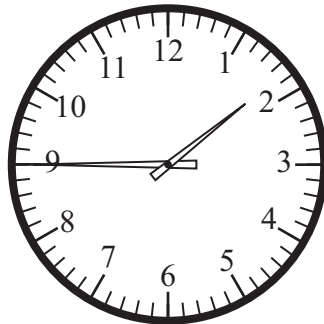
Here is a scale.



(b) On the scale, mark with an arrow (↑) the number 360

(1)

Here is a clock face.



(c) Write down the time shown on the clock face.

.....  
(1)

(d) Complete the following sentence by writing a suitable metric unit on the dotted line.

The length of a pen is 16 .....

(1)

**(Total for Question 4 is 4 marks)**



5 Here is a list of numbers.

3 6 7 8 11 25 27

(a) From the numbers in the list, write down

(i) an even number

.....  
(1)

(ii) a multiple of 9

.....  
(1)

(iii) a square number

.....  
(1)

(iv) a prime number

.....  
(1)

(b) Use brackets to make the statement correct.

You may use more than one pair of brackets in the statement.

$$2^2 + 5 \times 2 + 3^2 = 99$$

.....  
(1)

(Total for Question 5 is 5 marks)

6

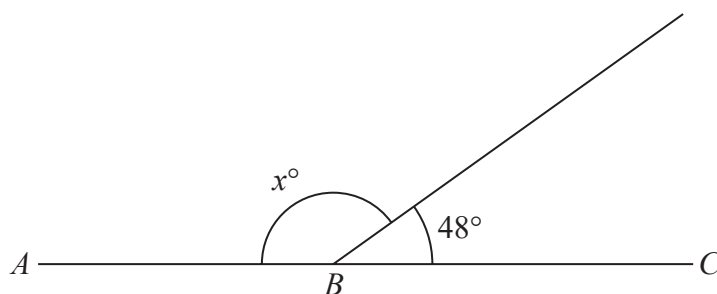


Diagram NOT  
accurately drawn

$ABC$  is a straight line.

(a)(i) Work out the value of  $x$

$x =$  .....  
(1)

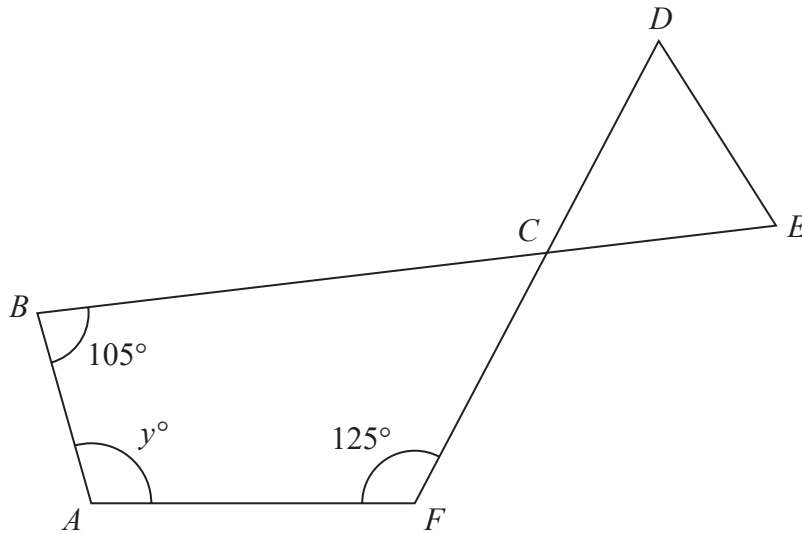
(ii) Give a reason for your answer to (i)

.....  
(1)



Question 6 continued

Diagram **NOT**  
accurately drawn



*CDE* is an equilateral triangle.  
*ABCF* is a quadrilateral.

*BCE* and *DCF* are straight lines.

- (b) Work out the value of  $y$   
You must show your working.

$y = \dots\dots\dots$   
(3)

(Total for Question 6 is 5 marks)

DO NOT WRITE IN THIS AREA

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7 Sandeep buys some flowers.  
He has 5000 rupees to spend.

He buys 6 carnations at 220 rupees each.  
He also buys some roses at 295 rupees each.

Sandeep should receive 140 rupees in change from his 5000 rupees.

Work out how many roses Sandeep buys.

.....  
**(Total for Question 7 is 4 marks)**

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8 (a) Simplify  $12g - 8e - 5g + 6e$

.....  
(2)

$$A = 3b - 5c$$

(b) Work out the value of  $A$  when  $b = 12$  and  $c = 4$

$A =$  .....  
(2)

(c) Solve  $4p + 9 = 24$

$p =$  .....  
(2)

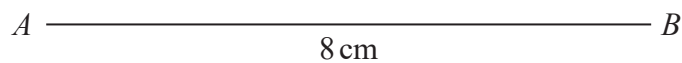
**(Total for Question 8 is 6 marks)**

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- 9  $ABC$  is a triangle.  
 $AB = 8\text{ cm}$ ,  $AC = 6\text{ cm}$  and  $BC = 9\text{ cm}$ .

Use a ruler and compasses to construct the triangle  $ABC$ .  
The side  $AB$  has been drawn for you.  
You must show all your construction lines.



(Total for Question 9 is 2 marks)

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