SUMMIT SATURDAY SCHOOL

ENTRANCE & SCHOLARSHIP EXAMINATION FOR 11+ CANDIDATES

SPECIMEN PAPER 2

MATHEMATICS

Time allowed: 60 minutes

Calculators may not be used

- Answer as many questions as you can.
- Write your answers in the spaces provided.
- Show any working in the spaces by the questions.
- If you cannot answer a question, go on to the next one.
- Use any spare time at the end to go back to any questions which you did not
- Complete and to check your work.

1. Find

(a) $826 + 579$ =

Answer:……

(b) $618 - 479$ =

Answer:……

(c) 362×78 =

Answer:……

(d) $4725 \div 35$ =

Answer:……

2. Calculate

(a) $87.608 + 14.9$ =

Answer:……

(b) $613.7 - 58.26$ =

Answer:……

(c) 26.4×5.7 =

Answer:……

(d) $168.024 \div 8$ =

Answer:……

3. Arrange these numbers from smallest to largest

7.08 0.708 8.07 0.870 8.7

Answer:……

4. Complete the following sequences

(a) 3, 5, 7, 9, ……., …….

(b) 1, 6, 11, 16, ……., …….

(c) 0, 1, 3, 6, 10, ……., …….

(d). 0, 2, 6, 12, 20, ……., …….

5. Susan is making a necklace of beads, using red and blue beads in the ratio 2 : 5. She has 49 beads altogether.

How many red beads will she need?

Answer:……

How many blue beads will she use altogether?

Answer:……

6. The three numbers missing from these boxes are all prime numbers. Write in the missing numbers.

☐ × ☐ × ☐ = 231

7. Make a list of all the whole numbers, which leave a remainder of 5 when divided into 41.

Answer:……

8. Emma's calculator displayed

172.35674

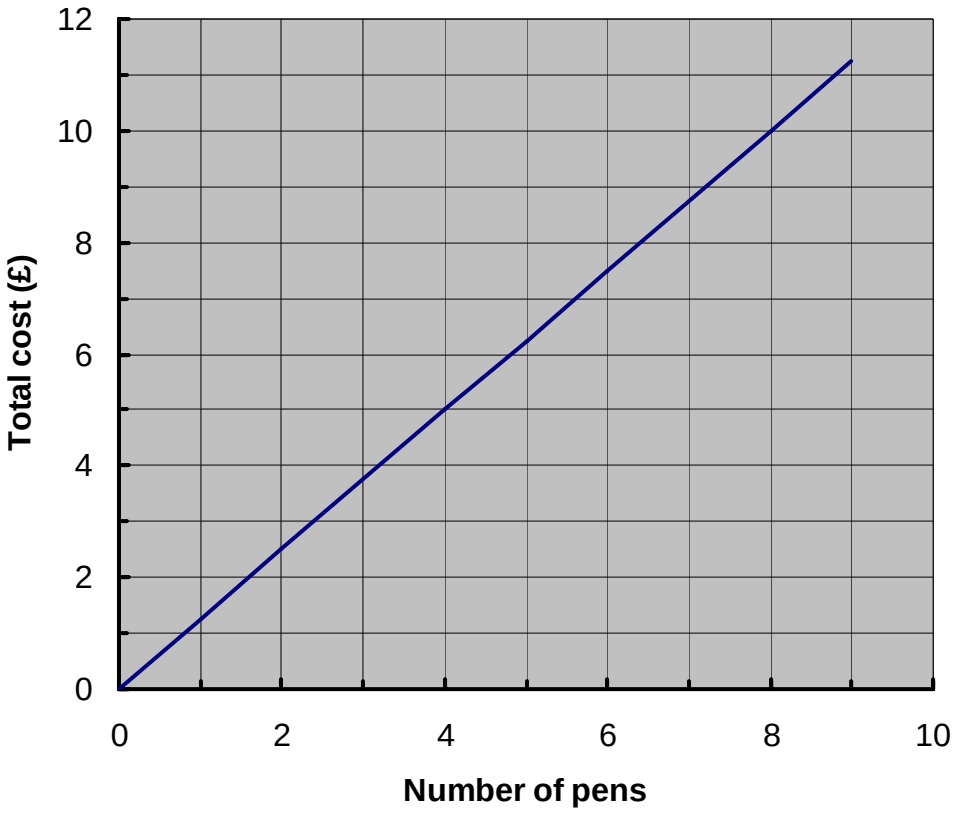
(a) Write this number correct to the nearest 100.

Answer:……

(b) Write this number correct to the nearest 10.

Answer:……

9. A pen cost £1.25 each. A shop uses the graph below to find the total cost when a customer buys more than one pen.



Use the graph to find

(a) The cost of 6 pens

Answer:……

(b) How many pens can be bought with £5

Answer:……

10. Choose from the following numbers

2 11 27 8 16 15 24 36 7 12

(a) Multiples of 4:

Answer:……

(b) Factors of 48:

Answer:……

(c) Square numbers:

Answer:……

(d) Cube numbers:

Answer:……

(e) Prime numbers:

Answer:……

11. Work out

(a) $\frac{3}{7}+\frac{2}{3}=$

Answer:……

(b) $\frac{3}{5}-\frac{1}{2}=$

Answer:……

(c) $\frac{10}{12}\times\frac{4}{25}=$

Answer:……

(d) $\frac{7}{15}\div\frac{5}{9}=$

Answer:……

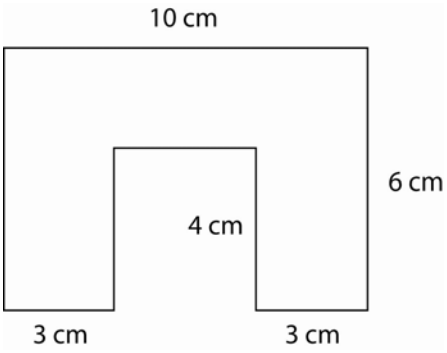
12. Ben puts £200 in a building society. Every year 6% interest is added to his money. What does he have after
(a) 1 year,

Answer:……

(b) 2 years?

Answer:……

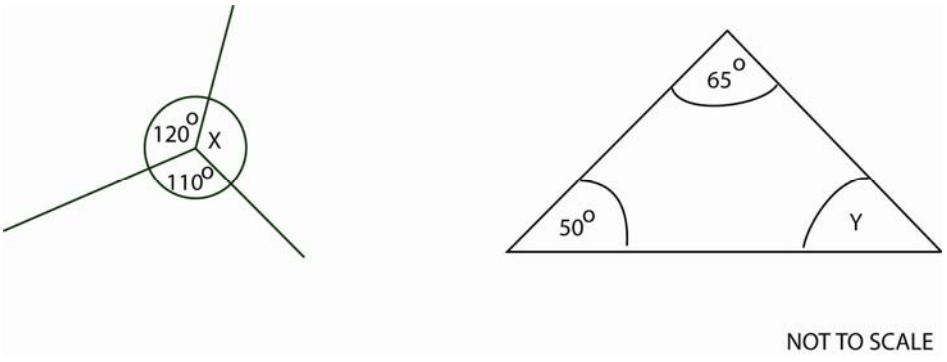
13. What is the perimeter and area of this shape?



Perimeter:……

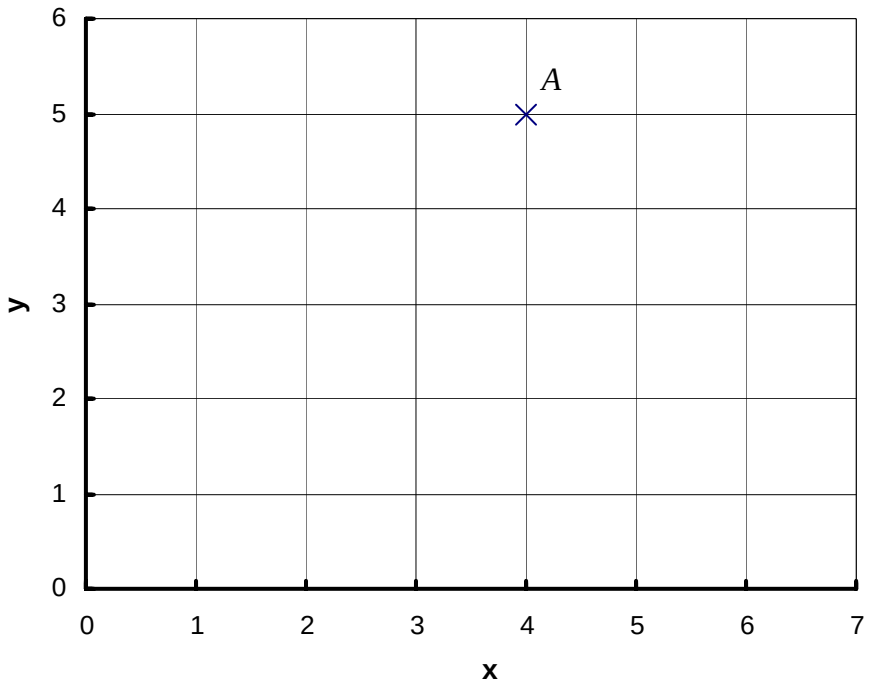
Area:……

14.



Angle X =……..Angle Y =…….

15. The point *A* (4, 5) is plotted on the grid



(a) Mark the points *B* (2,4) and *C* (4,0) on the grid.

(b) Mark another point *D* so that *ABCD* is a kite.

(c) Write down the coordinates of the mid point of *AC*.

Answer:……

16. Alex brings a packet of biscuits to school. In the morning he shares half the packet with Jade and Mark. In the afternoon he shares the other half with Liz. If there are 36 biscuits in the packet, how many does each of them have?

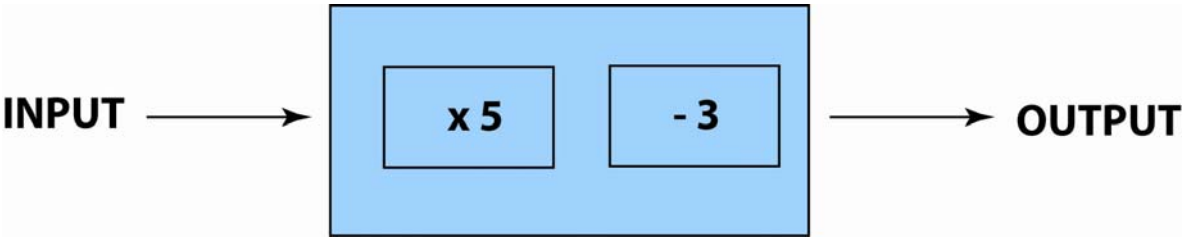
Answer: Jade.....

Alex .....

Liz.....

Mark.....

17. Michael has drawn a flow chart to represent a function machine.



(a) If the input is 5, what will be the output?

Answer:……

(b) What will be the input if the output is 37?

Answer:……

(c) Which input will give an output of -8?

Answer:……

(d) What will the output be if the input is zero?

Answer:……

18. I think of a number, add 4.6, then multiply by 7. The answer is 46.9. What is the number?

Answer:……

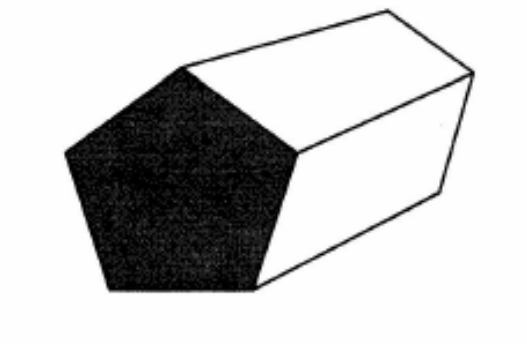
19. The numbers of ice creams sold on one week at a school were

Monday: 27	Tuesday: 36	Wednesday: 14
Thursday: 26	Friday: 17	

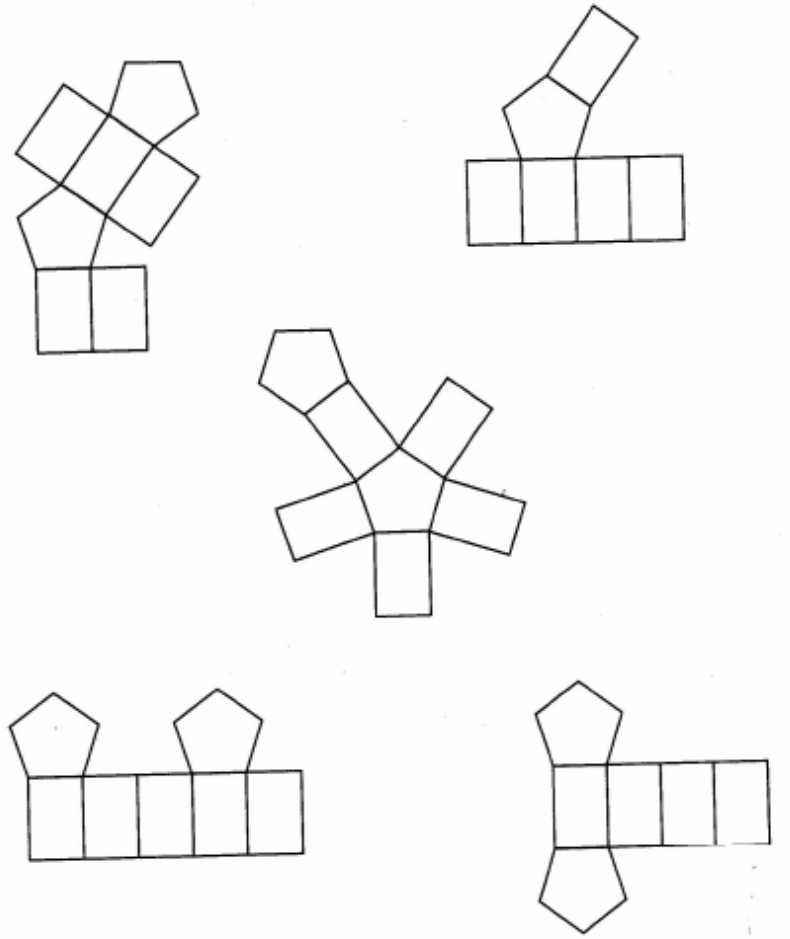
What was the mean number of ice creams sold per day?

Answer:……

20. This is a drawing of a pentagonal prism.



Circle the shape below that is a net for the prism



21. A sweet jar contains 10 toffees, 8 mints and 12 chocolates. A sweet is taken at random from a jar. What is the probability that a sweet is

(a) a mint

Answer:……

(b) a toffee

Answer:……

(c) a chocolate

Answer:……

(d) a mint or a toffee,

Answer:……

(e) not a mint

Answer:……

(f) a chocolate or a toffee?

Answer:……

END OF PAPER