Primary Five
Mathematics
Semestral Assessment Two

Section A (25 marks)
Question 1 to 5 carry 1 mark each. Questions 6 to 15 carry 2 marks each. For each question, four options are given. One of these is the correct answer. Make your choice (1, 2, 3 or 4) and write it in the box provided.

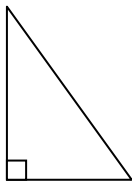1. $716 = 700 + \boxed{} + 6$

    (1) $\dfrac{1}{100}$

    (2) 0.1
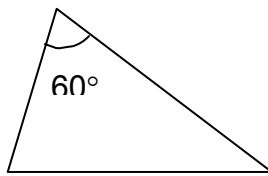
    (3) 1

    (4) 10

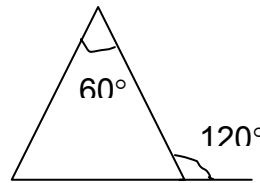2. In the figures below, not drawn to scale, which one is an equilateral triangle?
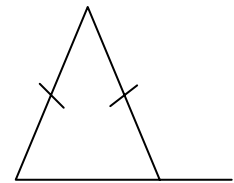

    (1)   (2)   (3)   (4)

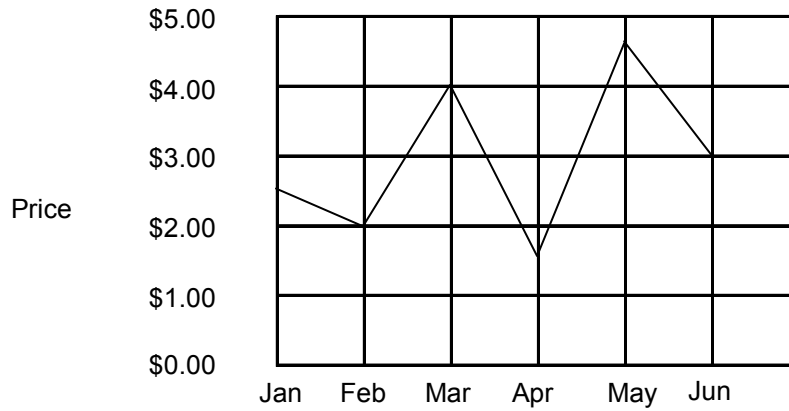3. Round off 19.716 to the nearest tenth.

    (1)   0.72

    (2)   19.7

    (3)   19.72

    (4)   20.0

4. In the model below, A is _____% of B.

A ☐☐☐

B ☐☐☐☐☐

    (1) $\dfrac{3}{5}$

    (2) $\dfrac{2}{5}$

    (3)   60

    (4)   40

5. The line graph below shows the selling price of a box of cards during the first 6 months of 2002.
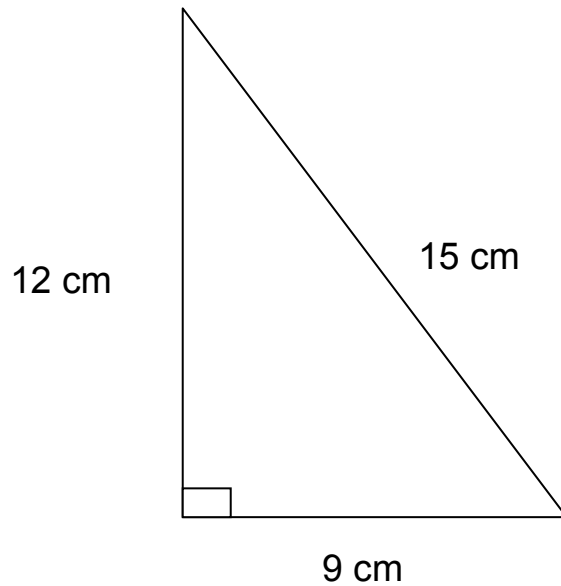

The greatest monthly decrease in price occurred between _____.

(1) January and February

(2) March and April

(3) April and May

(4) May and June

6. Simplify: $50 \div (48 - 38) \div 2 \times 3$

(1) 10

(2) 65

(3) 90

(4) 165

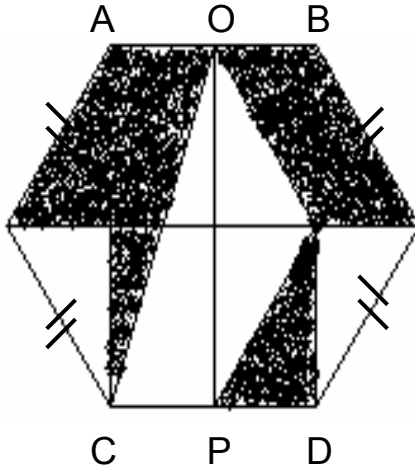7.   The perimeter of the figure below is _____ cm.

(1)   36
(2)   42
(3)   54
(4)   108

8.   In Sunshine School, $\frac{5}{7}$ of the pupils are boys. The ration of the number of girls to the number of boys in the school is _____.
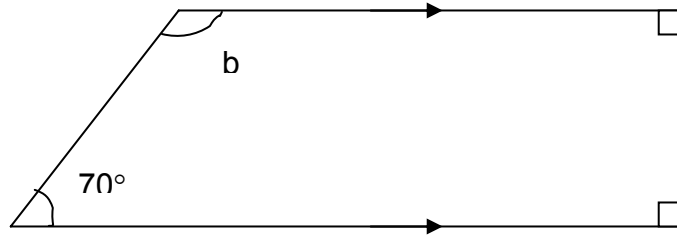
(1)   5 : 7
(2)   2 : 7
(3)   5 : 2
(4)   2 : 5

9.   In the figure below, all sides of the figure are equal. O and P are midpoints of AB and CD. What fraction of the figure is shaded?

A   O   B

C   P   D

(1) $\frac{1}{5}$

(2) $\frac{1}{4}$

(3) $\frac{1}{3}$

(4) $\frac{1}{2}$

10. In the figure below, not drawn to scale, $\angle b =$ _____°

(1) 20

(2) 70

(3) 90

(4) 110

11. Each day Jack must work 8 hours. This does not include the 45 minutes he takes for lunch. If the begins working at 7.45a.m. and it takes his lunch break at noon, then his working will end at _____p.m.

(1) 3.40

(2) 3.55

(3) 4.10

(4) 4.30

12. Express $\frac{3}{8}$ as a percentage.

    (1)   0.375%

    (2)   3.75%

    (3)   37.5%

    (4)   375%

13. Mrs Lee used $\frac{1}{3}$ of a bale of cloth to make some dresses. She then used $\frac{3}{5}$ of the remainder to make a few blouses. What fraction of the bale of cloth is left?
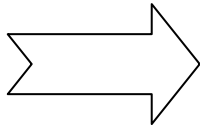
    (1) $\frac{1}{15}$

    (2) $\frac{4}{15}$
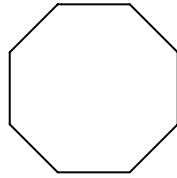
    (3) $\frac{2}{5}$

    (4) $\frac{14}{15}$
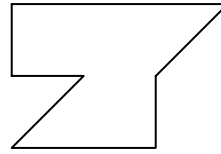
14. Which of the following shapes can be tessellated?
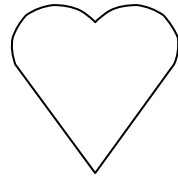
(1)   (2)   (3)   (4)

15. Miss Rena can type 3720 words in an hour. How many words can she type in 15 minutes?

(1)   62

(2)   248

(3)   930

(4)   992

SECTION B (20 marks)
Questions 16 to 35 carry 1 mark each. Write your answers in the specs provided.
Give your answers in the units stated.

16.   In 65.274, the value of the digit '7' is equal to 7 ÷ ☐
      What is the missing number in the ☐ ?

      ┌─────────────┐
      │   │
      └─────────────┘

17.   Simplify:

      4807 ÷ 23

      ┌─────────────┐
      │   │
      └─────────────┘

18.   In the figure below, find the area of the shaded part in the square ABCD.

      A _____ B

      8 cm

      4 cm

      D   C
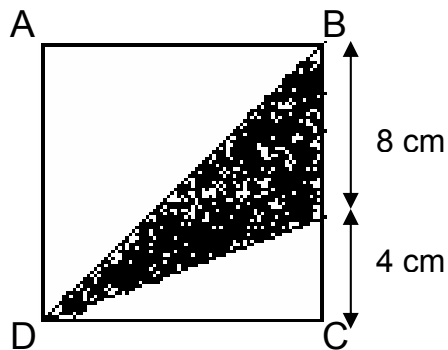
      ┌─────────────┐ cm^2
      │   │
      └─────────────┘

19. Divide 18 by 72. (Give your answer as a fraction in its simplest form)

[   ]

20. There are 56 apples and pears at a fruit stall. If there are 12 more pears than apples, find the ratio of the number of apples to the number of pears,

[   ]

21. In the following figure, not drawn to scale, find the value of $\angle x$.

[   ] °
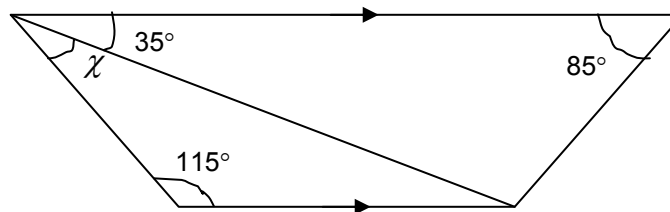
22. A plumber earns $300 in 5 das. At this rate, he will take _____ days to earn $780.

	days

The graph below shows the amount of saving in John's account from 15 January to 15 May. Study it and answer questions 23 to 25.
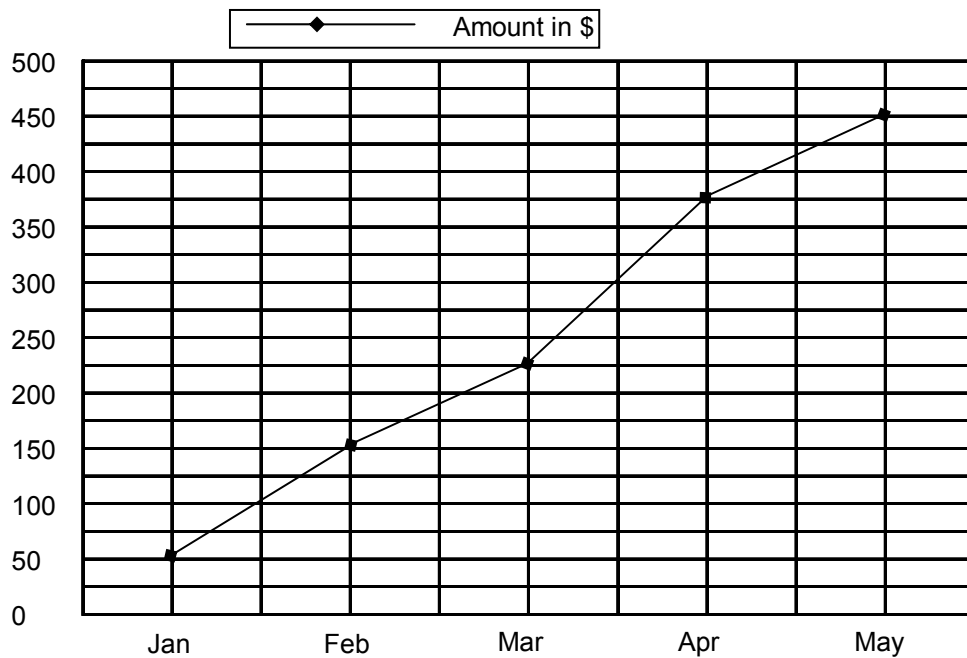
23. How much did John save in January?

$	

24. When did he put in the greatest amount into his account within a month?
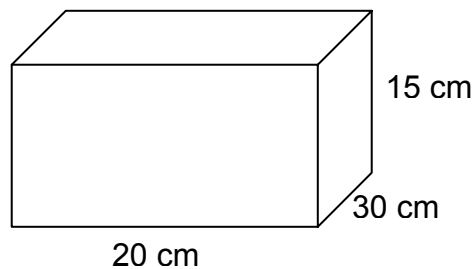
	to	

25. What was his average savings for the 5 months?

$	

26. A machine can pack 150 cans of coke in 10 min. At this rate, how long will it take to pack 1500 cans of coke? Express your answer as a fraction in its simplest form.
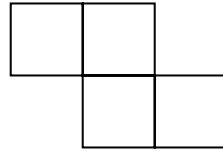
	h

27. What is the capacity of the tank below?

15 cm

30 cm

20 cm

	l

28. In the recent world cup, 16 teams were divided into 4 groups: A, B, C and D. If each team in a group played a game with each other team in the same group, how many games were played in all?

> [   ]

29. The figure below consists of 4 identical squares. If the area of the figure is 100 cm^2, find its perimeter.


> [   ] cm

30. To make a drink, Jane added 3 litres of water to every $\frac{1}{4}$ litre of syrup. If she used 2 litres of syrup, how much water would she need?

> [   ] *l*

13

31. In the figure below, not drawn to scale, ABCD is a rhombus. What is the difference between ∠a and ∠b?

A   B

b

110°   a

D   C

[   ] o
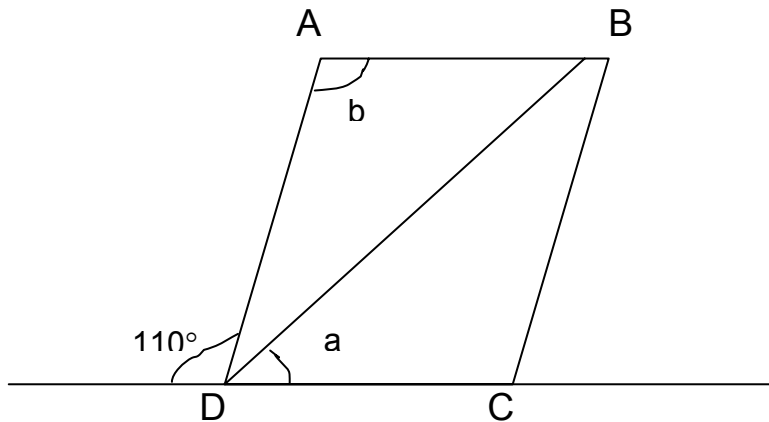
32. Ali had 29 guppies and 44 swordtails. After 9 swordtails and some guppies died, the ration of the number of swordtails to the number of guppies was 5 : 2. How many guppies died?

[   ]

33. In the following figure, not drawn to scale, the length of AC is _____ cm.

A

5 cm   110°

55°   C

B

[   ] cm
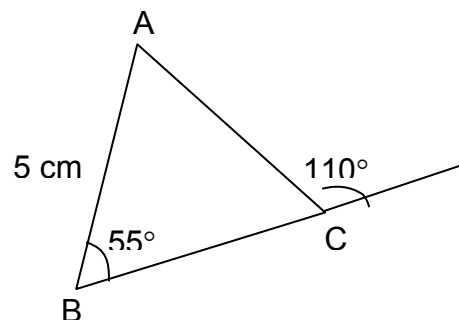
34. All items in the world of Sports are sold at 50% of the original price. On Saturdays, an additional discount 0f 20% off the sale price is given. If the original price of a sports jacket is $180, how much will MR Lee have to pay for it on a Saturday?

$ _____

35. Using only the paths and directions shown, how many different routes are there from M to N?



_____
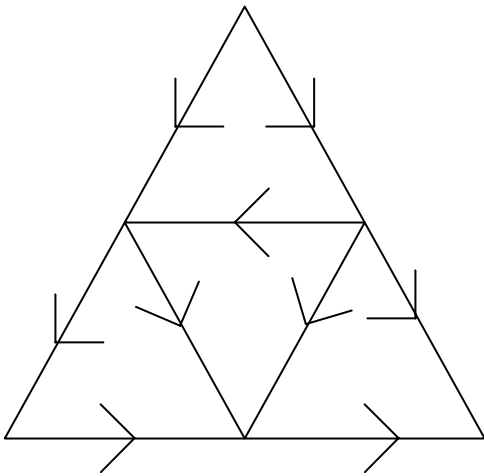
Section C (55 marks)
For questions 36 to 50, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks available is shown in brackets ( ) at the end of each question or part-questions.

36. Mrs Ali bought 4 kg 35 g of beef. She used $\frac{1}{3}$ of it to make a stew and kept the rest. How much beef did she use for the stew? (2m)
(Give your answer in kg and g)

37.
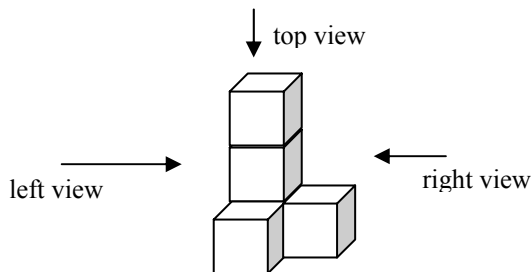
The figure above is made up of identical cubes. In the square grid below, draw and shade the top view of the figure. (2m)
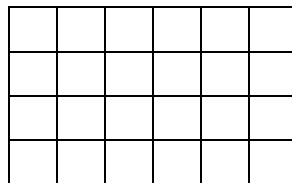
38. Shade the unit shape of the following tessellation. (1m)
Then draw 4 more of the unit shape in Blue to complete the tessellation. (1m)
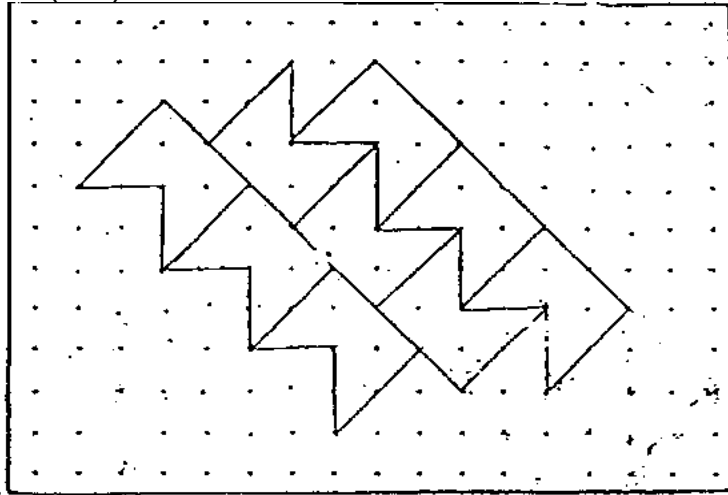
39. 40 pupils from P5A and 35 pupils from P5B went to the SPARKc camp. The number of girls from P5A was $\frac{2}{3}$ that of the girls from P5B. P5A had 11 more boys than P5B at the camp. How many boys from P5B went to SPARKc? (3m)

40. In the following figure, AB and AD are straight lines.
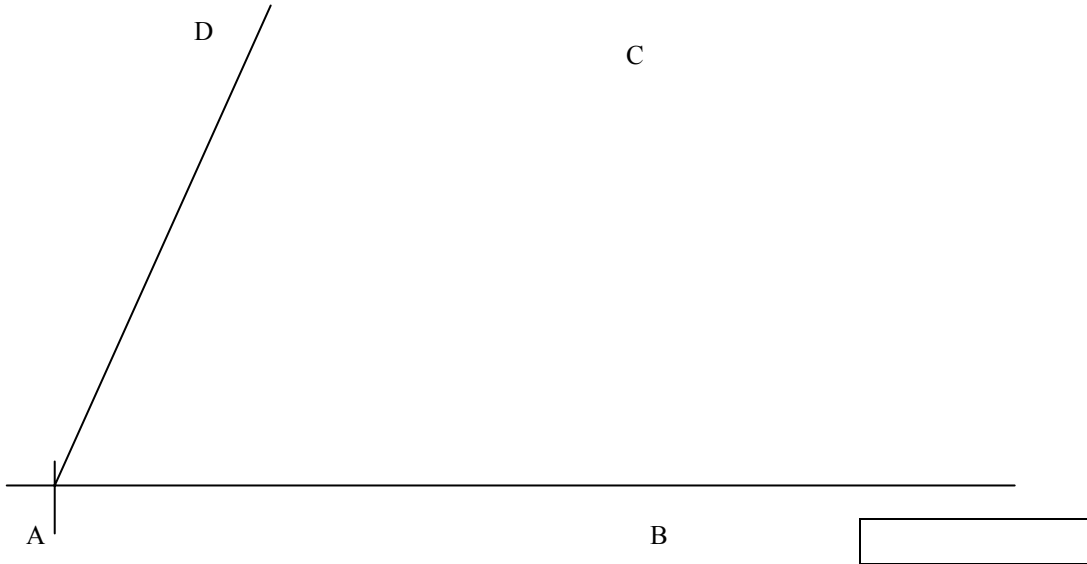   a) Draw a line through the point C, parallel to AB to meet AD at E. (2m)
    b) Join BC and name the completed shape. (1m)

D

C

A   B

[   ]

41. The table below shows the parking rate at a car park in a city.

8a.m. to 5p.m.	$1.50 per $\frac{1}{2}$h or part thereof
After 5p.m.	$1 per hour of part thereof

John parked his car there from 2.15p.m. to 6p.m.
How much did he have to pay? (3m)

[   ]

18

42. Rena withdrew some money leaving $213 in her account. After buying a radio that costs $119 and 2 blouses at $29 each, she put the reminder back into her account. If her account was originally 4 times the cost of the radio, what was the amount returned to her account? (4m)

43. A rectangle is divided into 4 right-angled isosceles triangles and a square as shown. If the area of the square is 4 cm^2, find the area of the rectangle.

4 cm
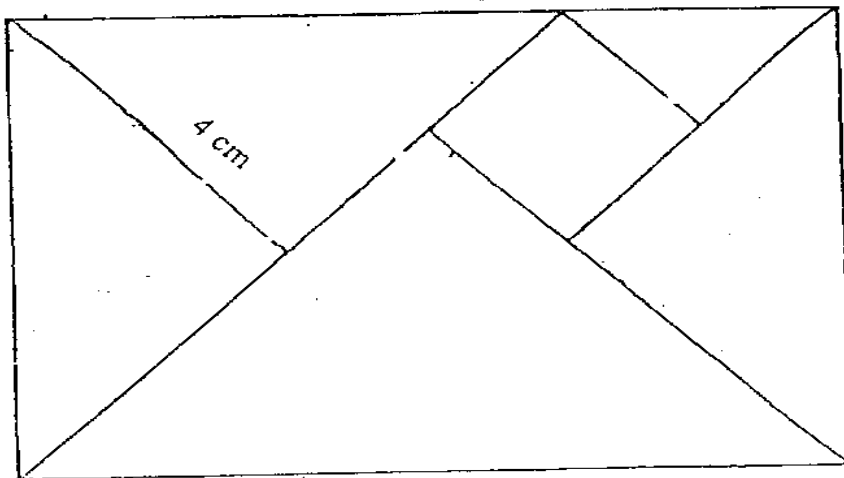
44. John and David saved \$900 altogether. $\frac{1}{4}$ of John's savings was equal to $\frac{1}{5}$ of David's savings. John then gave David $\frac{3}{8}$ of his savings. Find the ratio of David's savings to John's saving now. (4m)

45. Mr Chee weighs 20.5 kg more than his wife. Their total weight is more than their son's weight by 80.75 kg. The son weighs 0.75 as much as his mother. Find Mr Chee's weight. (4m)

46. The selling price of a coat is $100. During a sale, it is sold at 20% discount. An additional discount of $5 is given when a shopper uses a discount coupon. If Mr Heng buys the coat with a discount coupon and has to pay a GST of 3% of the final price, how much must he pay for the coat? (4m)

47. Ann, Betty and Carrie had 144 stamps altogether. Ann gave some of her stamps to Betty and Betty's stamps were doubled. Then Betty gave some of her stamps to Carrie and Carrie's stamps were doubled. As a result, the 3 girls had as equal number of stamps each. How many stamps had Ann at first? (5m)

48. There are 75 children n a choir. $\frac{1}{4}$ of the boys wear spectacles. $\frac{2}{5}$ of the girls wear spectacles. Altogether there are 24 children wearing spectacles. How many girls wear spectacles? (5m)

49. A wholesaler charges his customers $4.50 for each pen. He gives a discount of $50 for every bulk purchase of 300 pens. Mr Tan bought a pen each for his pupils for Children's Day. He paid the wholesaler $2000 and got back $511. How many pupils did he buy the pens for? (5m)

50. A rectangular glass container 30 cm by 20 cm by 50 cm is $\frac{4}{5}$ filled with water. Some of the water is poured into 2 identical tins to the brim. 14 litres of water is then left in the glass container. Find the height of each tin, if each has a 25 cm square base. (5m)

50 cm

20 cm

30 cm