Primary Five
Mathematics
Semestral Assessment Two

<u>**Section A**</u>
I. Question 1 to 5 carry 1 mark each.
   Question 6 to 15 carry 2 mark each.
   Choose the correct answer for each question and write its number
   (1, 2, 3 or 4) in the boxes provided.

1.   The sum of 6971 and 5291 is _____.

   (1)   11 162   (2)   12 162
   (3)   11 262   (4)   12 262

2.   Which of the following numbers is 100 more than 52 863?

   (1)   51 873   (2)   51 963
   (3)   52 863   (4)   61 863

3.   Which of the following is not equal to $^1/_3$?

   (1) $^1/_6 + ^1/_6$ (2) $^2/_9 + ^3/_9$
   (3) $^1/_{12} + ^3/_{12}$ (4) $^2/_{15} + ^3/_{15}$

4.   A water cooler can hold 40 litres of water when it is full. What fraction of
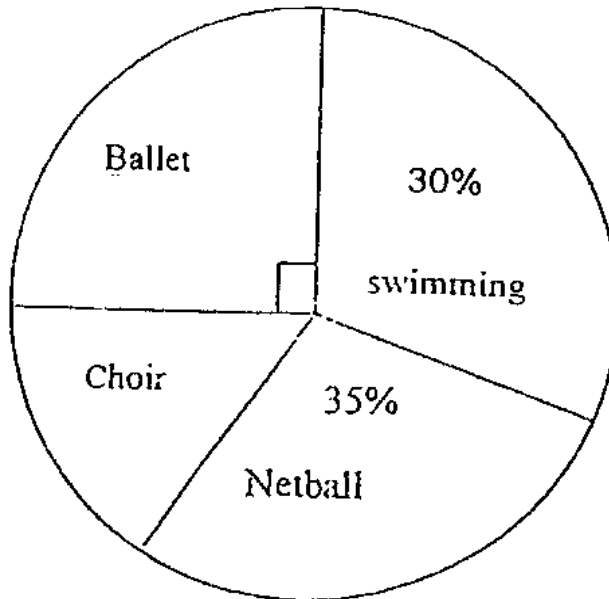   water is left in the cooler if 16 litres of water is poured out?

   (1) $^1/_4$ (2) $^2/_5$
   (3) $^3/_5$ (4) $^3/_4$

5. The pie chart below shows the co-curricular activities of the pupils in a class. What percentage of the class are choir members?

(1) 5%   (2) 10%
(3) 25%   (4) 35%

6. John wanted to use his calculator to subtract 319 from 1 463. He entered 1269 – 319 by mistake. What could he do to correct his mistake?

(1) Add 2   (2) Add 200
(3) Subtract 2   (4) Subtract 200

7. The ratio of the number of men to the number of women in a club is 3 : 7. There is 12 more women than men. How many members are there altogether?
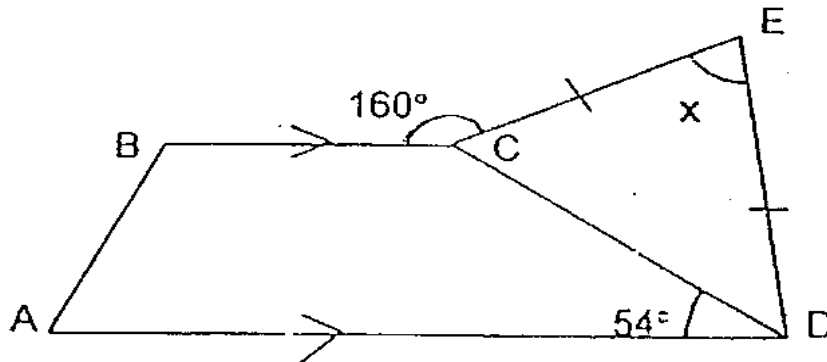
(1) 9   (2) 21
(3) 30   (4) 40

8. Joseph is $3/5$ times as old as John. What is the ratio of John's age to Joseph's age?

(1) 3 : 5   (2) 3 : 8
(3) 5 : 3   (4) 5 : 8

9. In 5 days, Nadia spent a total of 13 h 20 min practising on the piano. What was the average time she spent on the piano each day?

(1) 2 h 40 min   (2) 2 h 45 min
(3) 3 h 04 min   (4) 3 h 40 min

10. The figure shows a trapezium ABCD and a triangle CDE. If CE = ED, < BCE = 160° and < CDA = 54°, find the value of the value of x. (Figure is not drawn to scale.)
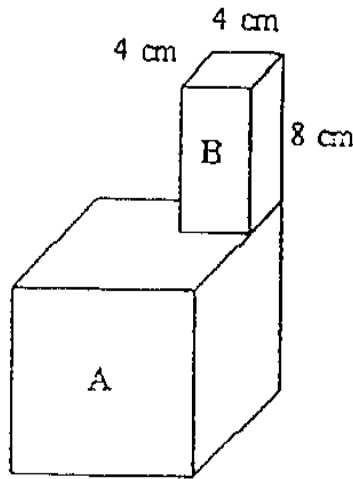

(1) 32°   (2) 63°
(3) 74°   (4) 106°

11. Printer A prints 50 cards per minute while Printer B prints 40 cards per minute. How long will it take both printers working simultaneously to print 1 350 cards altogether?
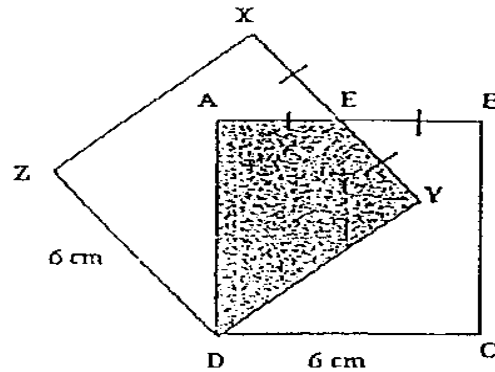
(1) 15 min   (2) 27 min
(3) 34 min   (4) 57 min

12. Solid A is a cube and solid B is a cuboid. The volume of solid B is $^1/_4$ of the volume of solid A. Find the total volume of both slides. (The figure is not drawn to scale.)

4 cm

4 cm

B | 8 cm

A

(1) 64 cm³   (2) 128 cm³
(3) 512 cm³   (4) 640 cm³

13. The figure is made up of two similar squares. AE = EB = XE = EY = 3 cm. Find the shaded area. (Figure is not drawn to scale.)

X

A   E   B

Z

Y

6 cm

D   6 cm   C

(1) 9 cm²   (2) 18 cm²
(3) 27 cm²   (4) 36 cm²

14. The usual price of a swimsuit was $60. A discount of 15% was given at a sale. Davinda bought the swimsuit and gave the cashier $100. How much change did she receive?

    (1) $ 9   (2) $ 49
    (3) $ 51   (4) $ 91

15. Which of the following is the smallest?

    (1)   7 / 10   (2)   3 / 50
    (3)   0.14   (4)   0.013

II. For each question, write your answer in the space provided. Give your answer in the unit stated. (20 X 1 Marks)

16.   Round off $ 9 0000.021 to the nearest hundred.

17.   The value of 6 + 8 X 4 – (14 + 21 ÷ 7) is _____.

18.   [   ] + 2 000 + 30 + 9 =1 004 739

       The missing number in the box is _____.

19.   Poh Chu Kang ordered 8 942 bricks for one construction project and half
       as much for another project. How many bricks did he order altogether?

20. $^1/_4$ + $^1/_3$ = $^3/_4$ - [   ]

       What is the missing fraction in the box? Give your answer in its simplest
       form.

21.   120 m = $\dfrac{\boxed{}}{500}$ km
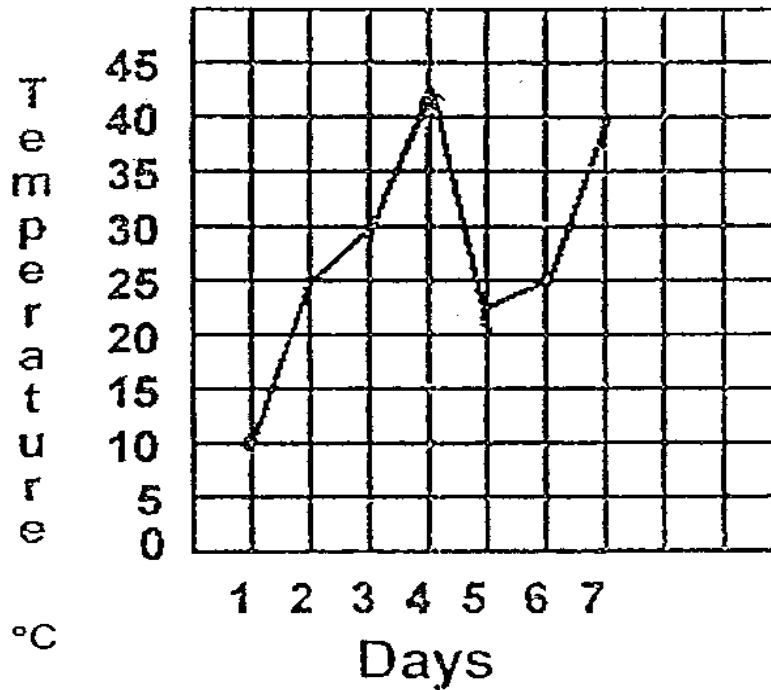
       What is the missing number in the box?

22. Sulin had some seashells. She gave Meiling $\frac{1}{5}$ of her seashells and gave Jancy $\frac{3}{4}$ of the remainder. Jancy received 18 seashells more than Meiling. How many seashells did Sulin have at first?

23. To mix a certain colour of paint, Alana combines 5 litres of red paint, 2 litres of blue paint and 2 litres of yellow paint. What is the ratio of red paint to the total amount of paint?

24. The ratio of the area of square A to that of square B is 121 : 144. Find the ratio of the length of the side of square A to that of square B.
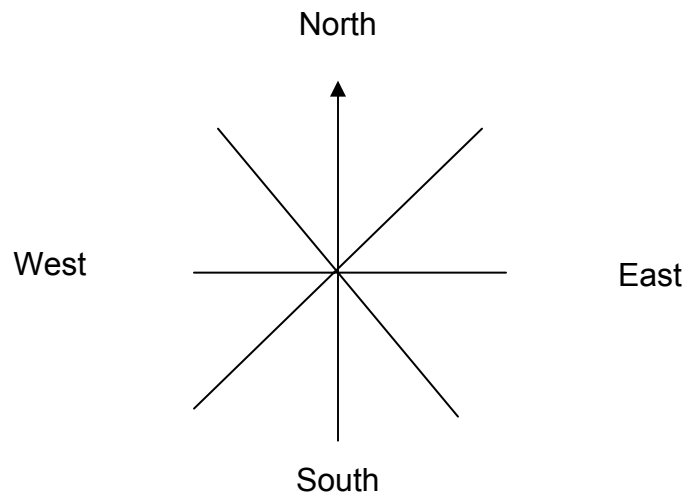
25. The line graph below shows the temperature for January 1 to 7 in Degrees Celsius. Study the graph carefully and answer the question below.

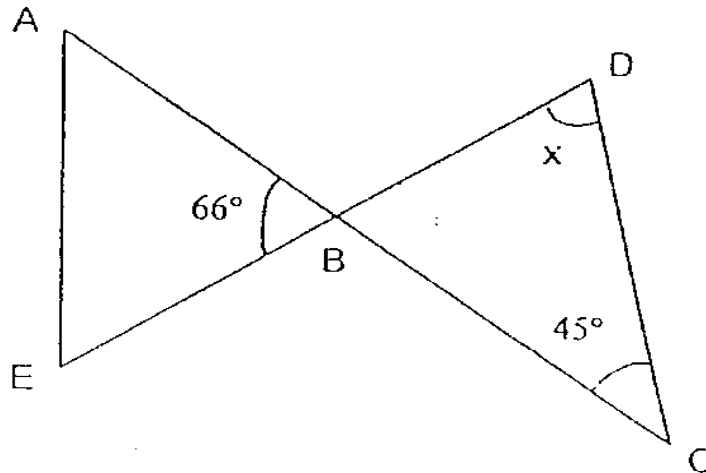## Average Daily Temperature for January 1 – 7 in Degrees Celsius

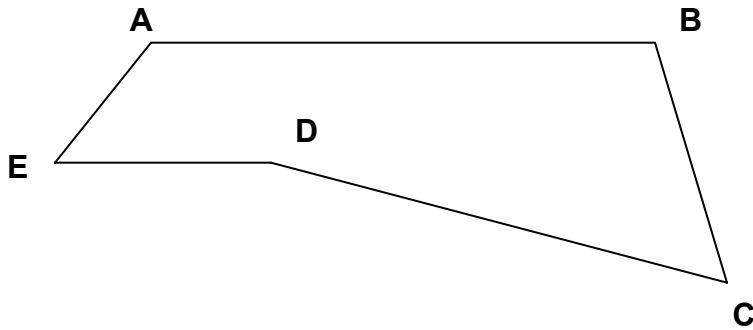The temperature was the least between Jan ___ and Jan ___.

26. Julia is facing north-west. If she makes a 270° turn clockwise, which direction will she be facing?

North

West   East

South

27. ABC and EBD are straight lines. Find the value of < x.

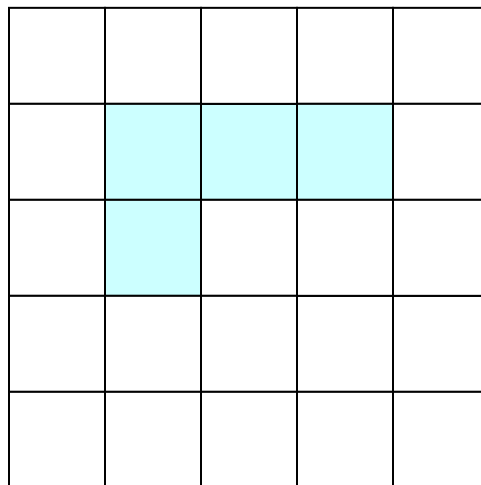A

D

66°   x

B

E

45°

C

28. In the figure, there is one pair of parallel lines. Name the lines that are parallel.

A   B

D

E

C

29. The average weight of 3 girls is 29 kg 250 g. What is their total weight?

30. Express 135 as a percentage of 900.

31. In order to have 40% of the figure shaded, how many more squares must be shaded?

32. Sherry spent $^1/_5$ of her salary and saved the rest. What percentage of her salary did she save?

%

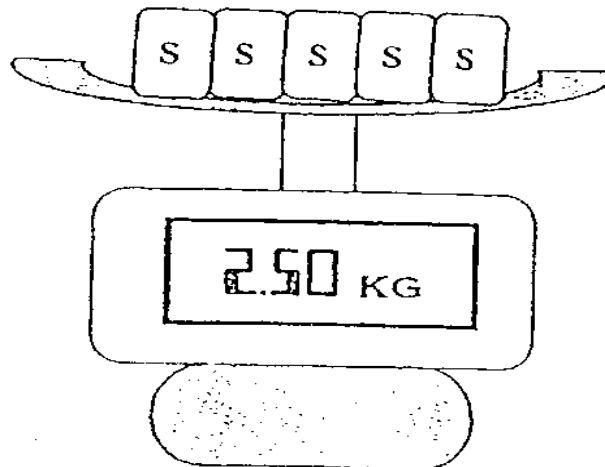33. Find the missing value in the box.

18.03 X 1 000 = [   ] ÷ 10

34. How many hundredths are there in 73.4?

35. 5 similar packets of sugar are placed on the digital weighing scale. Find the weight of one packet of sugar. (Express your answer as a decimal)
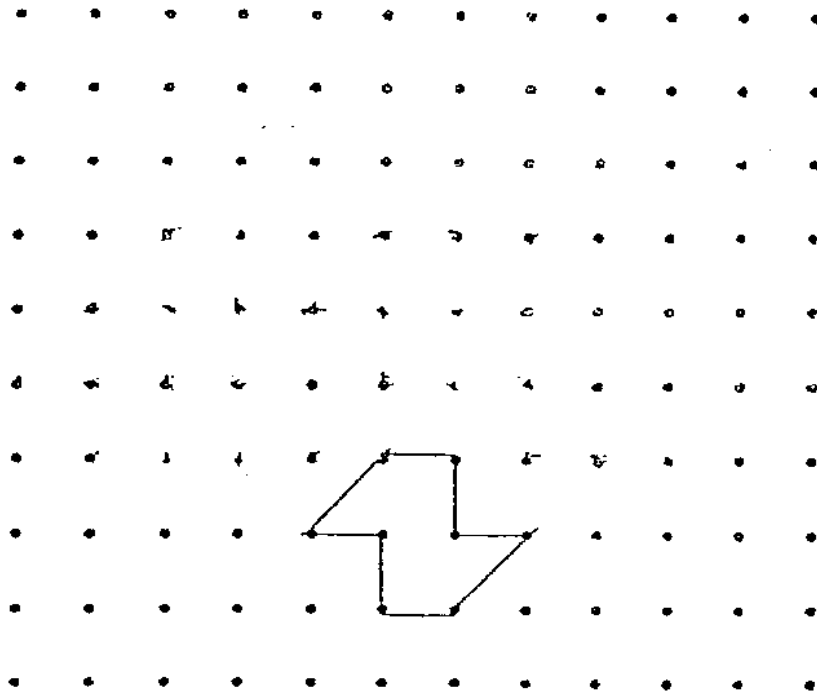
Section C (55 Marks)
III. For each question, show your working clearly in the space below each question and write your answers in the spaces provided. The mark for each question is given in the brackets.

36a.   Identify and shade the unit shape in the tessellation below. [1]

  b.   Extend the tessellation by drawing 4 more unit shapes in the space provided within the box. [1]

37.   A box containing 4 identical files weighs 2.3 kg. The same box containing 8 such files weights 3.9 kg. What is the weight of the box? [2]

38.   In a college library, 20% of the books were fiction books and the rest were reference books. When 840 new books were added to the library, the number of fiction books were doubled and the number of reference books was increased by $\frac{1}{4}$. How many books were there in the library at first? [3]

39. Ahmad and Bala each had the same number of stamps at first. After Ahmad used 75 stamps for postage and Bala used 27, Bala then had 7 times as many stamps as Ahmad. How many stamps did each of them have at first? [3]

40. In a porcelain ware shop, a teapot cost 6 times as much as a cup. A customer spent $\frac{5}{12}$ of her money on some cups and $\frac{1}{7}$ of her remaining money on 4 teapots. How many cups did she buy? [3]

41. Mr Raja's monthly income is $ 2 500. He spends $\frac{7}{20}$ of it on himself, $\frac{1}{5}$ on his children and $\frac{1}{3}$ of the remainder on his parents. He then saves the rest in the bank. How much would he have saved after half a year? [4]

42. A backpacker travelled $^3/_{10}$ of his tour in Europe by train, $^1/_4$ of it on foot and the rest by bus. He found that he had travelled 270 km more by bus than by train.
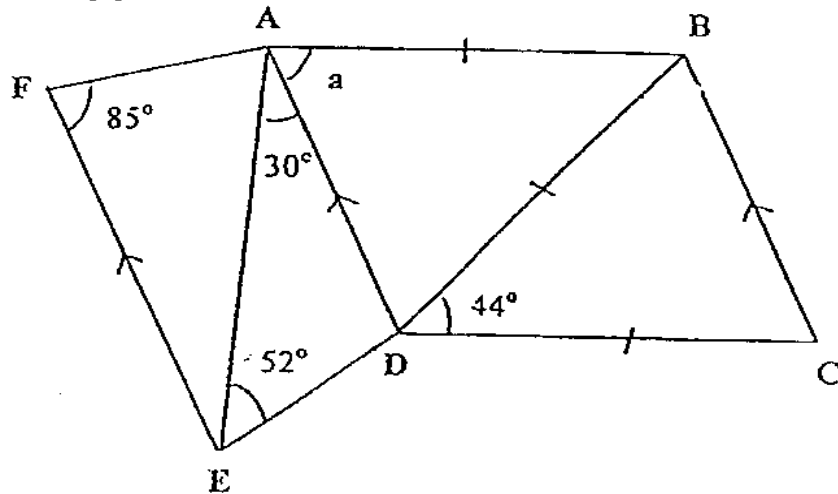
   (a) What is the total distance of his tour? [3]
   (b) What distance did he travel by bus? [1]

43. Keila mixed orange, grapefruit and passion fruit syrup in the ratio 2 : 3 : 7 to make a fruit punch that consists of 156 ml of syrup.

(a) How much grapefruit syrup was used to make the fruit punch? [2]
(b) How much more passion fruit syrup than orange syrup was used? [2]

44. Figure ABCD is a parallelogram. Figure ADEF is a trapezium. The diagram is not drawn to scale.

   (a) Find ∠ a. [2]
   (b) Find ∠ EAF. [2]

45.

Bicycle For Hire	
For the first hour	$ 5.00
For every additional ½ hour or part thereof	$ 2.00

Juriah hired a bicycle at 8.30am. She returned it 2 ¾ hours later.

(a)   At what time did she return the bicycle? [1]
(b)   How much did she pay for hiring the bicycle? [3]

46. The average weight of three parcels A, B and C is 6 kg. A is 0.7 kg heavier than B and 0.35 kg heavier than C. What is the weight of Parcel B? [4]

47. The length of a rectangle is 24 cm. Its breadth is $\frac{1}{3}$ its length.
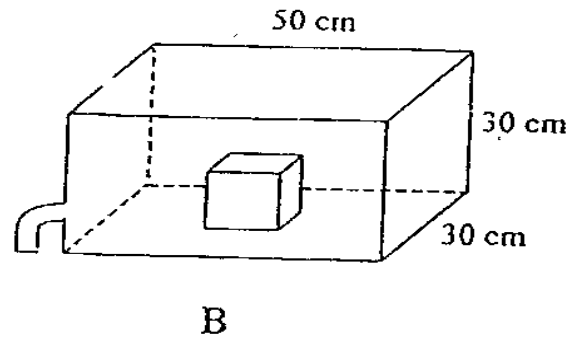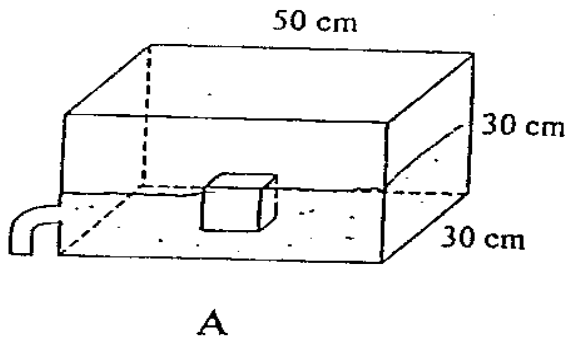
  (a) Find the perimeter of the rectangle. [2]
  (b) A piece of wire was used to form this rectangle. If this piece of wire was used to form a square, what would be the area of the square? [2]

48. For every 10 tickets purchased, a 20% discount will be given to the 10th ticket. Each ticket cost $15.

(a) Sally bought 10 tickets and she received $3 change. How much did she give the cashier? [2]
(b) How many tickets did Hannah buy when she paid the cashier $ 177? [2]

49. Tanks A and B, each with a solid cube inside, were filled to the brim with water. The tap were turned on at the same time. Water flowed out of each tank at the rate of 1.5*l* per min until the water level reached the height of the solid cube inside the tanks. Tank A took 25 minutes but Tank B took 2 minutes less.

   (a) What was the difference in the volume of the solid cubes? [3]
   (b) If the cube in Tank B is removed, how many litres of water remain in the tank? [2]

A

B

50. $^3/_5$ of the people at an outdoor concert were children. $^3/_4$ of the remaining people were women. There were 140 more children than men. More adults came to the concert. Then the number of adults increased by 60%. How many more adults came to the concert? [5]