MINISTRY OF EDUCATION

ST. VINCENT AND THE GRENADINES

COMMON ENTRANCE EXAMINATION

2009

MATHEMATICS

TEST CODE: 012A

Time allowed: 1 hour 30 minutes

Instructions:

1. This examination has 60 items.
   Each item has four possible answers: **A, B, C, D.**
   Choose the correct answer.

2. On your answer sheet, shade the circle which contains the letter you have chosen for your answer.

   Please use a No. 2 HB pencil

3. **Do not take any paper out of the examination room.**
   Return this booklet, your answer sheet and all scrap paper to the invigilator before you leave the room.

4. You have **90 minutes** in which to complete this test.

1 $2485 - 154 =$

A. 331	B. 945
C. 1145	D. 2331

2 $4000 + 100 =$

A. 3000	B. 3900
C. 4100	D. 5000

3 $\frac{1}{2}$ of $6 =$

A. 3	B. 4
C. 8	D. 12

4

321 + 195

Which of these is the **BEST** approximation for the addition shown above?

A. $300 + 100$	B. $300 + 200$
C. $400 + 100$	D. $400 + 200$

5 Which one of the following is **NOT** a prime number? **2, 4, 5, 7**

A. 2	B. 4
C. 5	D. 7

6 Which statement gives the **SAME** result as **10 x 8**

A. $10 \times 1 \times 8$	B. $10 \times 0 \times 8$
C. $10 \times 1 + 8$	D. $10 \times 0 + 8$

7 What needs to be added to 5.4 to make 9.3?

A.　14.7　　　　　　　　B.　4.9

C.　4.1　　　　　　　　　D.　3.9

8 Which of the following is a mixed number?

A.　$1\frac{2}{7}$　　　　　　　B.　$\frac{9}{7}$

C.　$\frac{7}{9}$　　　　　　　　D.　$\frac{0}{9}$

9 5 % written as a fraction is

A.　$\frac{1}{5}$　　　　　　　　B.　$\frac{1}{2}$

C.　$\frac{5}{10}$　　　　　　　　D.　$\frac{5}{100}$

10 What is the value of the <u>4</u> in the number 1<u>4</u>321

A.　40　　　　　　　　　B.　400

C.　4000　　　　　　　　D.　40000

11 Median is to middle as mean is to

A.　Frequency　　　　　　B.　Average

C.　Total　　　　　　　　D.　Range

12 What is the sum of the angles in a triangle?

A.　60°　　　　　　　　　B.　90°

C.　180°　　　　　　　　D.　360°

13 What is the average of 10, 15 and 5 ?

A.   3   B.   10

C.   15   D.   30

14 One of these numbers can be expressed as the product of two **EVEN NUMBERS**. Which is it?

A.   18   B.   24

C.   26   D.   30

15 Which of these numbers is halfway between 3 and 5?

A.   3   B.   3 ½

C.   4   D.   4 ½

16 How many quarters are in 2 ¾ ?

A.   Three   B.   Six

C.   Eight   D.   Eleven

17

In the number statement on the right, the symbol ◉ represents | 48 ◉ 0.5 = 96 |

A. addition   B.   subtraction

C. multiplication   D.   division

18 Which two of the four numbers shown in the box on the right are used to obtain the greatest difference

| 103 | 3703 |
| 3 | 1703 |

A. 103 and 3   B.   1703 and 103

C. 3703 and 3   D.   3703 and 1703

19 The highest common factor of 3, 10, 12 is

A.   1   B.   3

C.   5   D.   12

20 Which group of words below correctly name the number shown in the place value chart?

Tens of Thousands	Thousands	Hundred	Tens	ones
9	0	3	5	6

A.   Nine thousand three hundred and fifty six

B.   Ninety thousand three hundred and fifty six

C.   Nine hundred and three thousand and fifty six

D.   Nine hundred thousand three hundred and fifty six

21

1st	2nd	3rd	4th	5th
54	63	72		

Using the diagram above. Which of these numbers is the fifth in the sequence shown above?

A.   71   B.   81

C.   83   D.   90

22 The number that is **THREE TENS** more than 495 is

A. Four hundred and sixty five   B.   Four hundred and ninety eight

C. Five hundred and twenty five   D.   Six hundred and ninety five

23 Which shows the correct equivalence between grams (g) and kilograms (kg) ?

A. $10g = 1 \text{ kg}$ B. $100g = 1 \text{ kg}$

C. $1000g = 1 \text{ kg}$ D. $10000g = 1 \text{ kg}$

24 Which one of the following statements is **TRUE**?

A.   All multiples of 2 are also factors of 4

B.   All multiples of 4 are also factors of 2

C.   All multiples of 2 are also multiples of 4

D.   All multiples of 4 are also multiples of 2

25 Which of the marked angles below is acute?
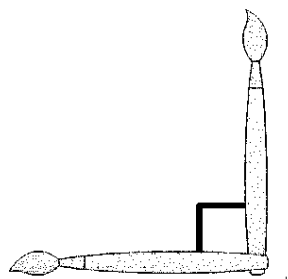
A
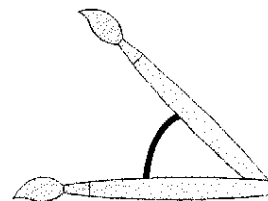
B

C
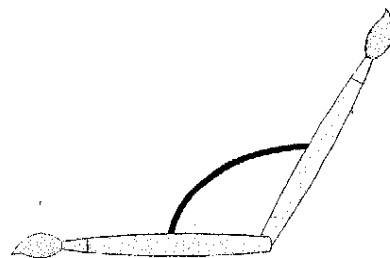
D

26   A car travels at 40km per hour. What distance in km, did the car cover in 15 minutes?

     A.   10 km   B.   25 km

     C.   55 km   D.   600 km

27   Fifty percent (50 %) of a certain number is 200. What is 1% of that number?

     A.   1   B.   2

     C.   3   D.   4

28   Which one of these shapes below has TWO lines of symmetry?

A   L   B   H

C   F   D   E
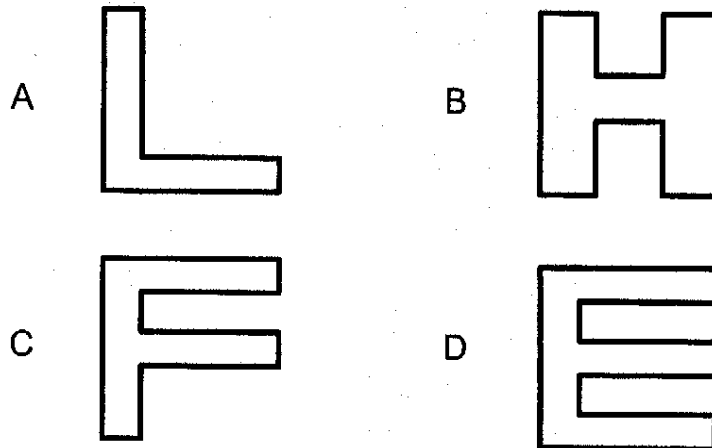
29   The range is the difference between the greatest and least values of a set of scores. Which of these sets of scores has the smallest range?

     A.   { 7, 8, 9 }   B.   { 5, 6, 10}

     C.   { 2, 4, 8 }   D.   { 1, 4, 5 }

30

$$\boxed{3 \quad 5 \quad 7 \quad 8}$$

Which one of the scores below can be placed in the table above to make 7 the middle score (median)?

     A.   2   B.   4

     C.   6   D.   9

31

7, 8, 8, 9, 9, 10

The score which occurs the most is called the mode. Which score should be removed from the table above to make 9 the mode?

A.   7   B.   8

C.   9   D.   10

32

What is the total amount of money shown on the right?

A. $100.01   B. $100.10

C. $101.00   D. $110.00

33

The shape on the right shows a circle with centre O. What name is given to OR ?

A. radius   B.   circumference

C. diameter   D.   centre

34　Which length of wire shown below can be cut to make a square of sides 3cm?

A

3 cm

B

6 cm

C

9 cm

D

12 cm

35　Which diagram below shows a vertical line segment cut by two horizontal line segments?

A　　　　　　B　　　　　　C　　　　　　D

36　The table below shows the number of points scored by houses on a school's sports day.

House	Points
Red	210
Green	190
Blue	
Yellow	215
TOTAL	837

The points for all four houses together total 837. The house with the most points was the overall winner, which house is this?

A.　Red　　　　　　　　　B.　Green

C.　Yellow　　　　　　　D.　Blue

37   The product of 12 and 4 is written as:

    A.   12 + 4   B.   12 x 4

    C.   12 - 4   D.   12 ÷ 4

38   Which is the **BEST** estimate for the area of the shape shown on the grid on the right?

    A.   4 square units   B.   6 square units

    C.   8 square units   D.   12 square units
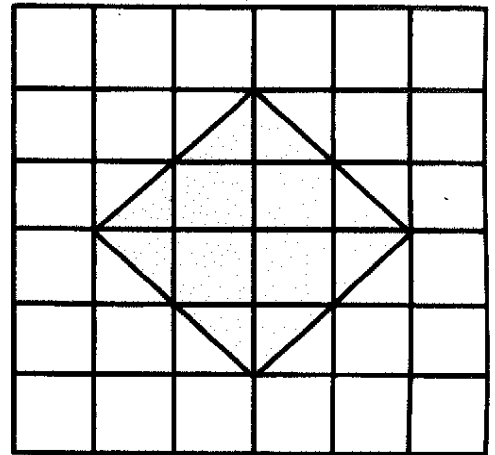
39   What is the equivalent cost of this radio in EC $? If | **US $ 1.00   =   EC $ 2.67**

PRICE:
US $ 100.00

    A. $ 26.70   B. $ 102.67

    C. $ 267.00   D. $ 2670.00

40 Which of the diagrams below represents a drawing that shows a circle in a triangle that is in a rectangle.

A   B

C   D

41
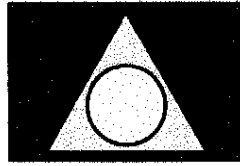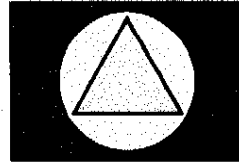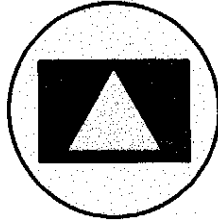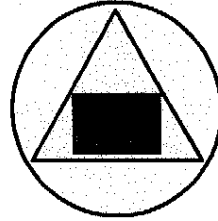
The figure above shows part of a correctly worked subtraction item. Which of the following **BEST** represents the item?

A.   339 – 77   B.   539 – 272

C.   639 – 272   D.   639 – 372

42

1 metre
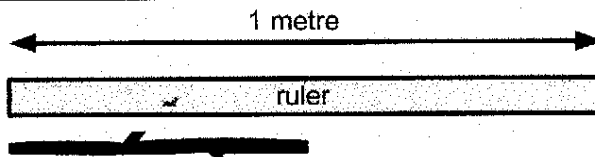
ruler

In the diagram above, which statement best describes the relationship between the length of the stick and the ruler?

A.   The ruler is half the length of the stick

B.   The stick is half the length of the ruler

C.   The ruler is quarter the length of the stick

D.   The stick is quarter the length of the ruler

The diagram on the right is made up of a square attached to one side of a triangle.
Use this diagram to answer questions **43** and **44**

6 cm   6 cm

4 cm

4 cm
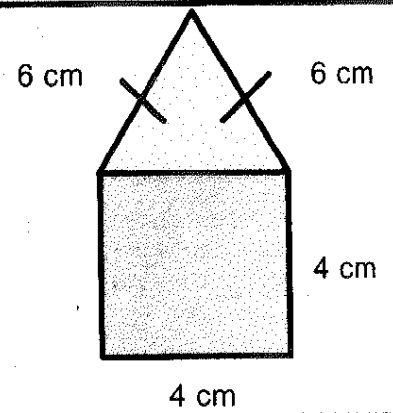
43

What type of triangle is shown in the diagram?

A.   Equilateral   B.   Right angled

C.   Scalene   D.   Isosceles

44

What is the perimeter of the shape?

A.   20 cm   B.   24 cm

C.   28 cm   D.   30 cm

45

Position: 1ˢᵗ   2ⁿᵈ   3ʳᵈ   4ᵗʰ
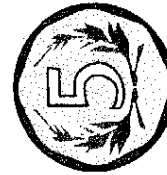
Sita keeps rotating a five cents coin 90° from its center to form the pattern shown above. Which figure shows the coin in its seventh (7ᵗʰ) position?

A   B

C   D

46　The ball shown on the grid on the right is at position (2,2). The ball is moved 3 places to the right and 4 places upwards. What is the new position of the ball?

A. (3,4)

B. (4,3)

C. (5,6)

D. (6,5)

47
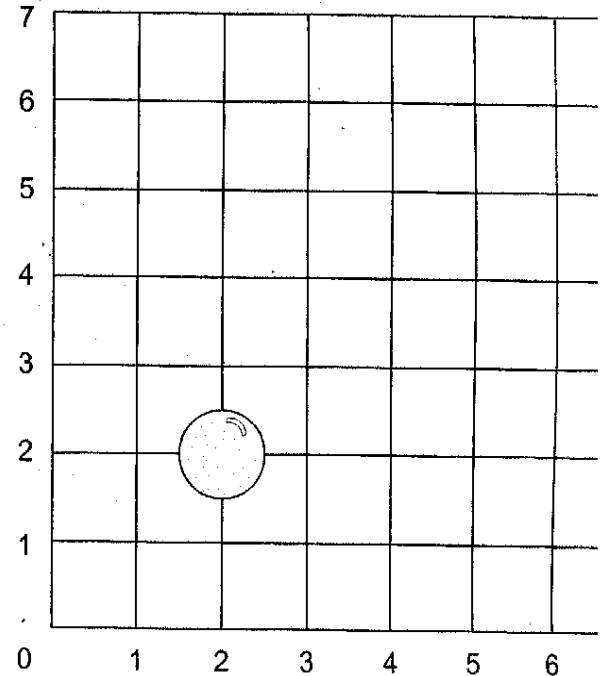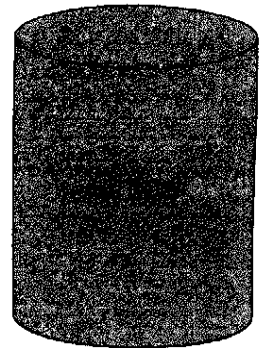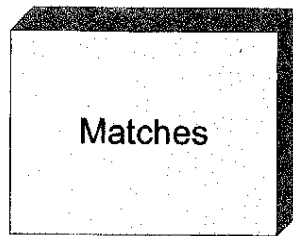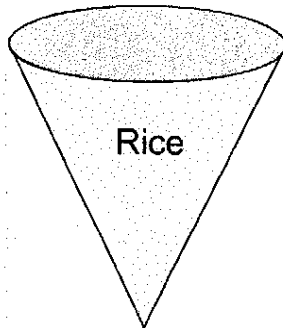
Rice

Matches

The figure above shows the shape of the container in which the named article is stored In which of the following are all articles correctly matched to the shape of the container in which they are stored?

A	B	C	D
rice → cylinder	rice → cone	rice → cone	rice → cuboid
matches → cone	matches → cuboid	matches → cylinder	matches → cylinde
chips → cuboid	chips → cylinder	chips → cuboid	chips → cone

48 | One of the shapes shown on the grid below has an area that is **NOT** 2 square units. Which shape is it?
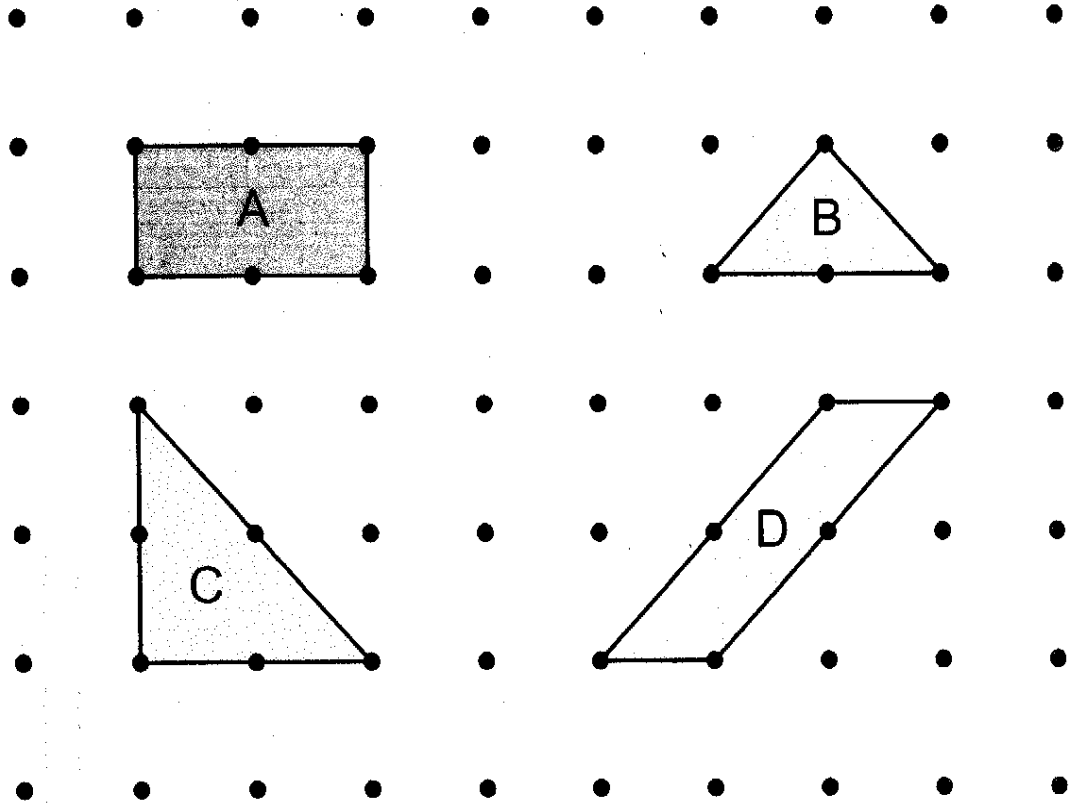
49 | Which set of numbers below shows three odd numbers?

A. 20, 21, 22

B. 20, 22, 24

C. 21, 23, 25

D. 20, 21, 23

50 Syl paid for a bag with a $100.00 bill. The change he received was $25.00. What is the cost of the bag?

    A. $ 25.00

    B. $ 75.00

    C. $ 125.00

    D. $ 99.75

51 The figure on the right shows Mrs. Browne's bill for some articles bought. How much did she pay for **ONE** blouse?

    A. $ 24.00

    B. $ 48.00

    C. $ 72.00

    D. $ 192.00

LEVI'S

31.05.09

1 Skirt	$ 23.00
1 pair of shoes	$ 49.00
2 blouses	$
TOTAL	$ 120.00

52 The diagram on the right shows that the distance across the one cent coin is approximately 2 cm. Which is the best approximation for the distance across **13** one cent coins placed side by side?

2 cm
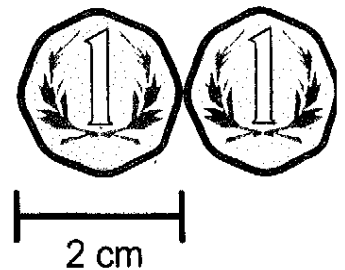
    A. 13 cm

    B. 15 cm

    C. 24 cm

    D. 26 cm

53

Kirk has 15 marbles. Susan has **TWICE** as many as Kirk. If ⬛ represents 5 marbles, which diagram shows the given information.
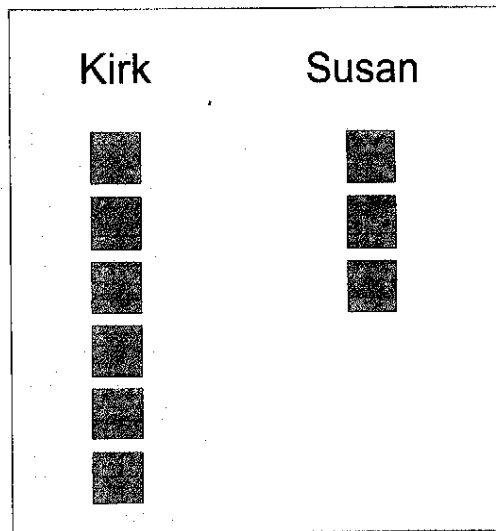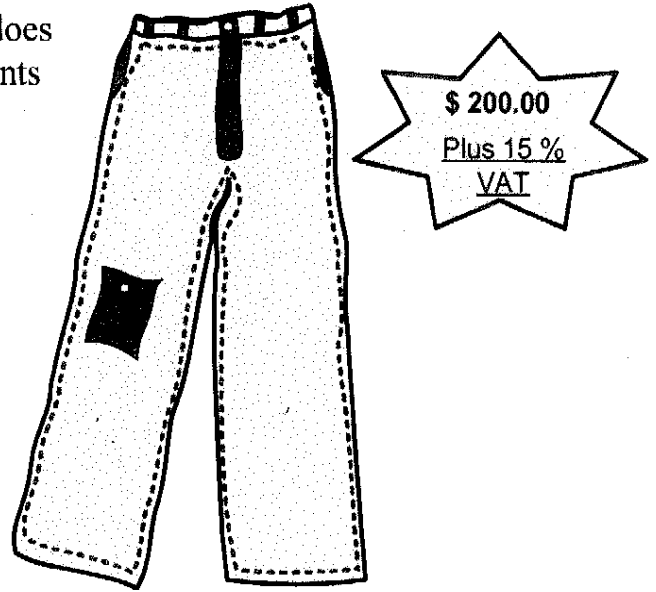
A

Kirk	Susan
⬛	⬛
⬛	⬛
⬛	

B

Kirk	Susan
⬛	⬛
⬛	

C

Kirk	Susan
⬛	⬛
⬛	⬛
⬛	⬛
	⬛
	⬛
	⬛

D

Kirk	Susan
⬛	⬛
⬛	⬛
⬛	⬛
⬛	
⬛	
⬛	
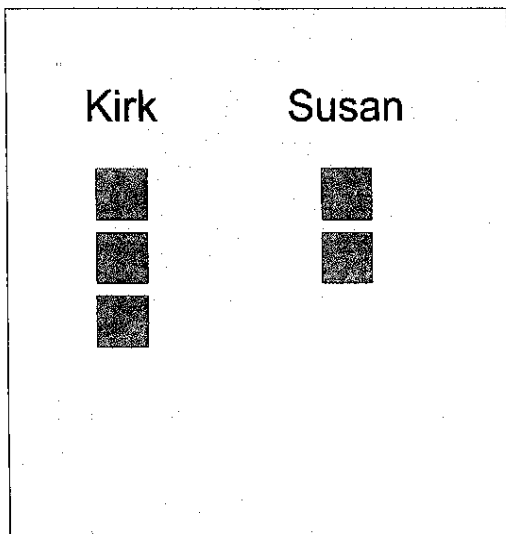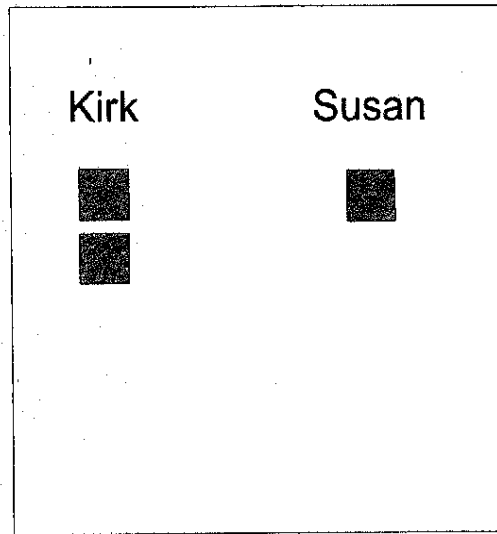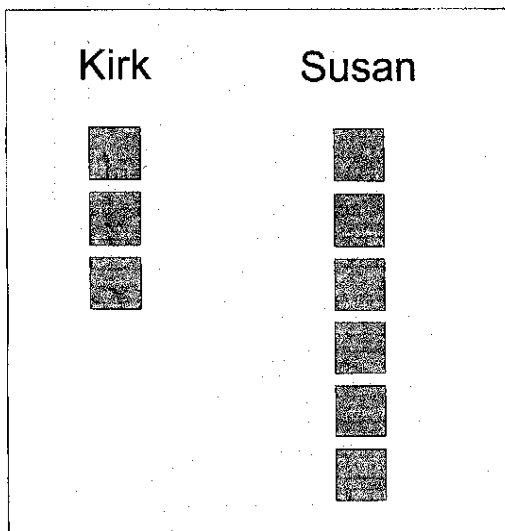
54 VAT is the amount of money that is added to the price of the article. How much money does a customer pay altogether for the pair of pants shown on the right?

$ 200.00
Plus 15 %
VAT

A. $ 30.00

B. $ 170.00

C. $ 215.00

D. $ 230.00

55 The jug shown on the right holds 4 litres when full.
While the glass holds 200ml when full.
The full jug of water is poured into several of the glasses.
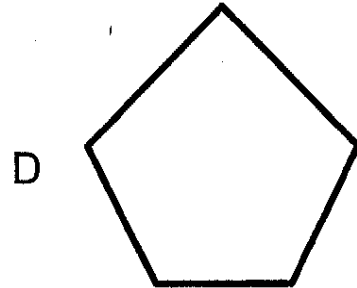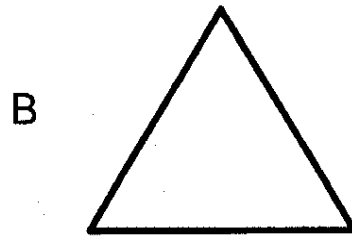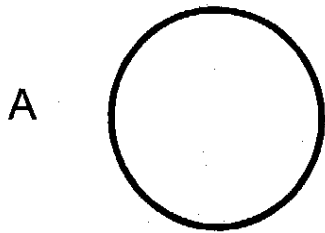How many glasses will be completely filled?
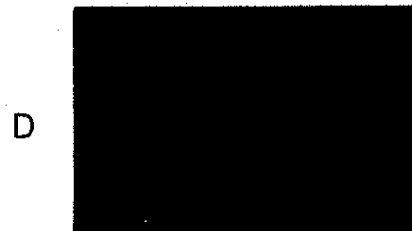
4L

3L

2L

1L

200ml
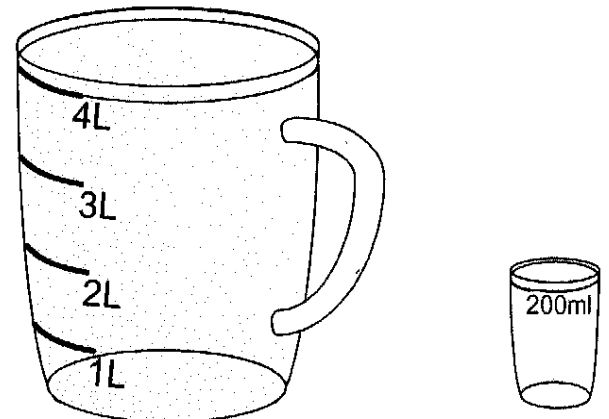
A. 20

B. 50

C. 196

D. 800

56 Which one of these clocks is showing the **EARLIEST** time of the same day?

A [11:55 am]   B [11:55 pm]

C [12:03 am]   D [12:03 pm]

57 Which shape shown below has **2** diagonals?

A

B

C

D

58 Which diagram shows 50% shaded?

A

B

C

D
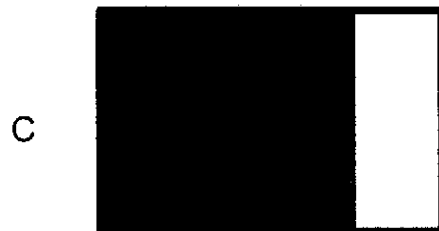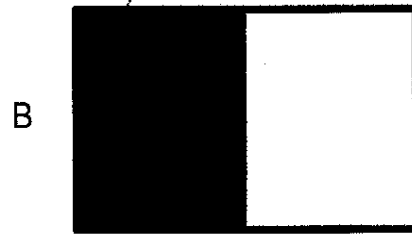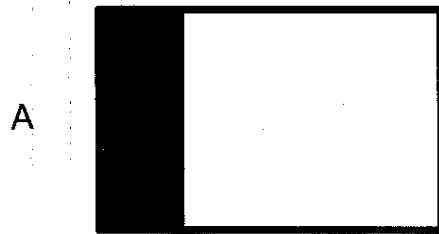
The chart below shows the results of matches played by Golden Stars Netball team. Use the chart to answer questions **59** and **60**

Results of matches played   **/**

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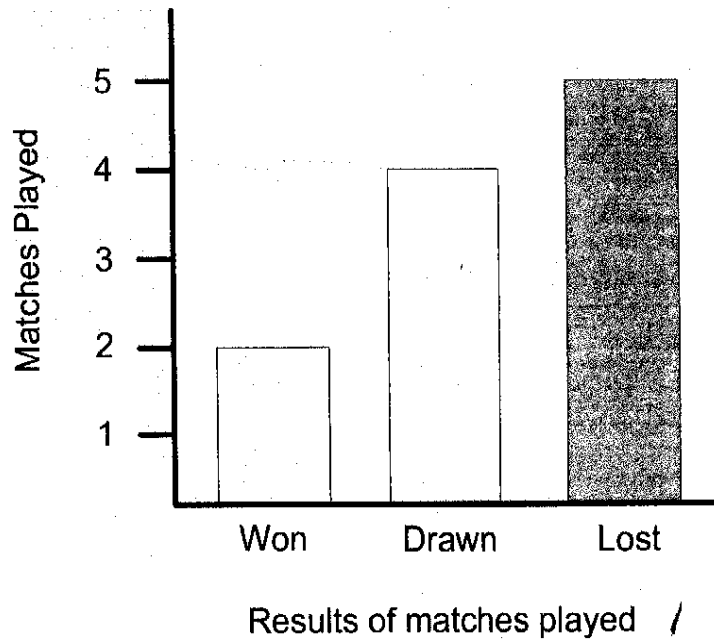
59   How many matches did Golden Stars win?

     A. 0

     B. 1

     C. 2

     D. 3

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60   Which statement is **TRUE** about the information shown in the chart?

     A. Golden Stars drew one match more than they lost

     B. Golden Stars lost twice as many matches as they won

     C. Golden Stars won one match more than they drew

     D. Golden Stars drew twice as many matched as they won