

**MINISTRY OF EDUCATION**  
**ST. VINCENT AND THE GRENADINES**



**COMMON ENTRANCE EXAMINATION**

**2010**

**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.

Which one of the following is the square of a whole number?

- A 2                      B 3                      C 4                      D 5

23.  $8 \times 1 \times 0 =$

- A 0                      B 1                      C 8                      D 80

$263 + 20 + 3 =$

- A 286                      B 313                      C 466                      D 763

$21 + 21 + 21$  gives the same result as

- A  $21 + 3$                       B  $21 - 3$                       C  $21 \div 3$                       D  $21 \times 3$

$4873 - 360 =$

- A 1203                      B 1273                      C 4510                      D 4513

$612 \div 6 =$

- A 12                      B 102                      C 112                      D 163

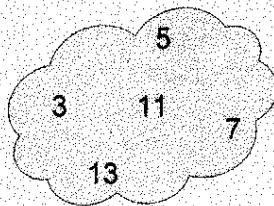
2, 3, 5, 8, 12, \_\_\_\_\_

Which of the following is the **NEXT** number in the sequence shown above?

- A 13                      B 16                      C 17                      D 20

The number 679 rounded to the nearest ten is:

- A 610                      B 670                      C 680                      D 690



The numbers in the loop above are **BOTH**:

- A odd and prime                      B even and prime  
C odd and composite                      D even and composite

$$4.3 + 8.4 + 9.5 =$$

A 0.222

B 2.22

C 22.2

D 222



What is the mass in grams of the package of rice shown?

A 10

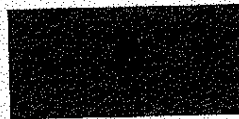
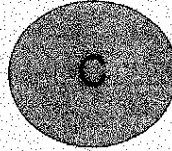
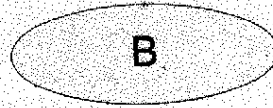
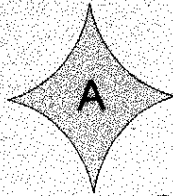
B 100

C 1000

D 10000

Which one of the shapes below does not belong in the box?

- Shapes with only two lines of symmetry



$$\frac{3}{5} - \frac{1}{2} =$$

A  $\frac{2}{3}$ B  $\frac{2}{10}$ C  $\frac{5}{10}$ D  $\frac{1}{10}$ 

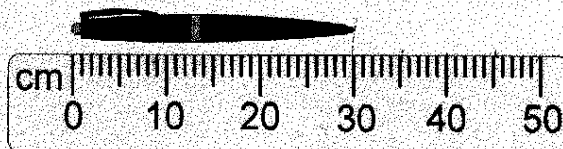
If  $3.15 \times 10 = 31.5$ , then  $3.15 \times 100 =$

A 0.315

B 3.15

C 31.5

D 315.0



In the diagram above, what is the difference between the length of the ruler and the length of the pen?

- A 20cm                      B 70cm                      C 80cm                      D 130cm

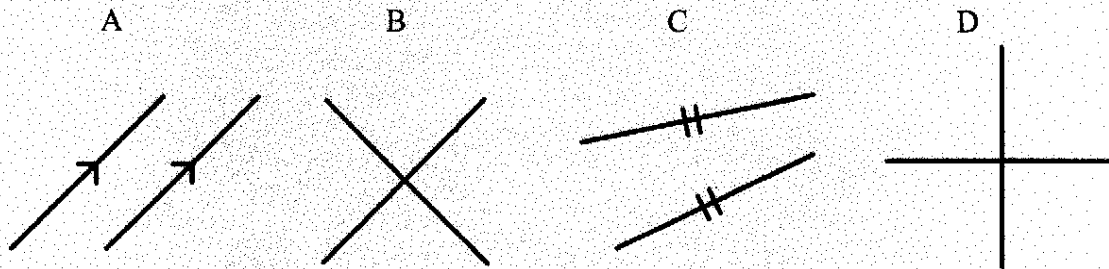
Which set of fractions is arranged in order from largest to smallest?

- A  $\left\{ \frac{1}{3}, \frac{1}{6}, \frac{1}{9} \right\}$                       B  $\left\{ \frac{1}{3}, \frac{1}{9}, \frac{1}{6} \right\}$   
 C  $\left\{ \frac{1}{9}, \frac{1}{3}, \frac{1}{6} \right\}$                       D  $\left\{ \frac{1}{9}, \frac{1}{6}, \frac{1}{3} \right\}$

Which of the following statements is **NOT** true about a triangle?

- A A triangle has three sides  
 B A triangle has three angles.  
 C The angles in a triangle add up to  $180^\circ$ .  
 D The angles in a triangle add up to  $360^\circ$

Which diagram **BEST** shows a pair of parallel lines?



Which of these numbers has a 4 in the hundreds place?

- A 6541                      B 4165                      C 1654                      D 1456

How many whole numbers less than 19 can be divided exactly by 2?

- A 7                      B 8                      C 9                      D 10

Which of the following gives the same result as  $10 \times 2$  ?

A  $5 \times 2 \times 2$

B  $8 + 2 \times 2$

C  $12 - 2 \times 2$

D  $10 \div 2 \times 2$

If  $6 + \Delta = 8 + 7$ , then  $\Delta =$

A 21

B 15

C 9

D 7

$16 - (3 + 4) =$

A 9

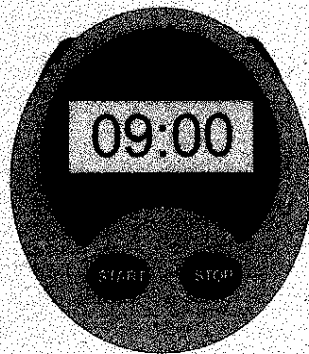
B 15

C 17

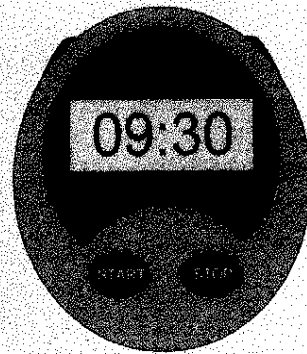
D 23

On the 24 hour clock which one of the following times below is the same as 9.00pm?

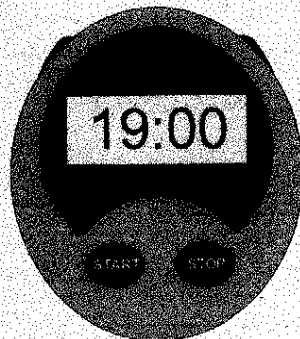
A



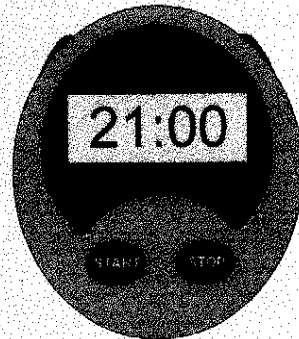
B



C

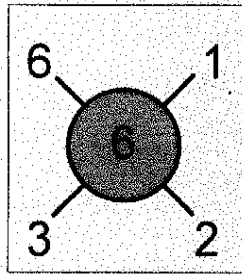


D

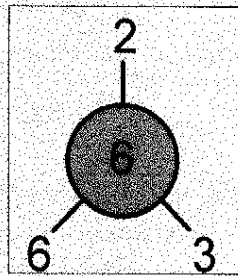


Which of the following diagrams lists all the factors of 6?

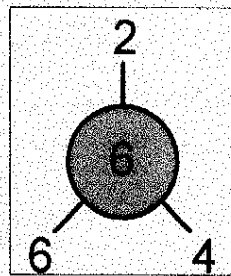
A



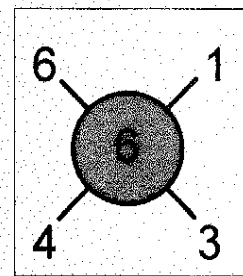
B



C



D



What is the L.C.M. of 4 and 6?

A 2

B 10

C 12

D 24

How is 9 written in Roman numerals?

A XI

B IX

C VIII

D IVV

Use the table of scores below to answer questions 28 and 29

2, 4, 5, 2, 1, 2, 5

What is the mode in the set of scores above?

A 2

B 3

C 5

D 17

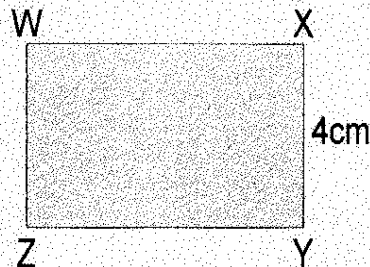
The mean of the set of scores is

A 2

B 3

C 7

D 21



The perimeter of rectangle  $WXYZ$  shown in the diagram above is 28cm. What is the length, in cm, of side  $YZ$ ?

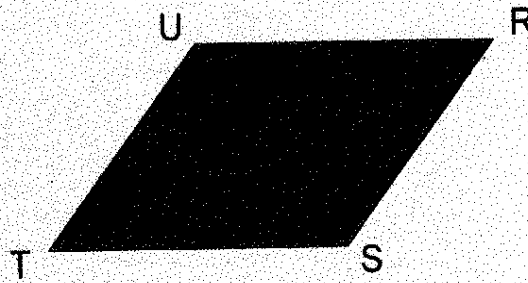
A 10

B 14

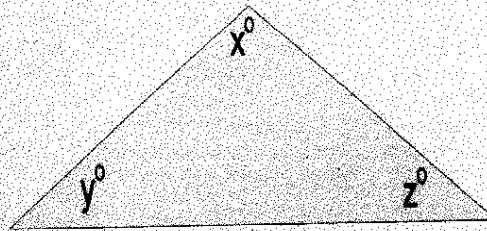
C 20

D 24

In the shape given below, which two angles are acute?

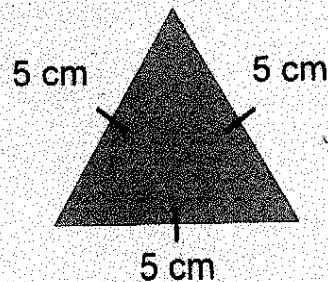


- A (R and S)      B (R and T)      C (U and T)      D (U and S)



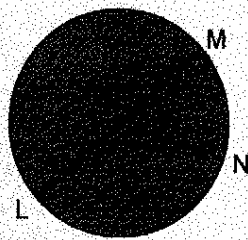
In the triangle above, angle X is an obtuse angle. Which of the following is true about angles y and z?

- A They are less than  $90^\circ$   
B They are more than  $90^\circ$   
C They add up to  $90^\circ$   
D They are  $90^\circ$  angles



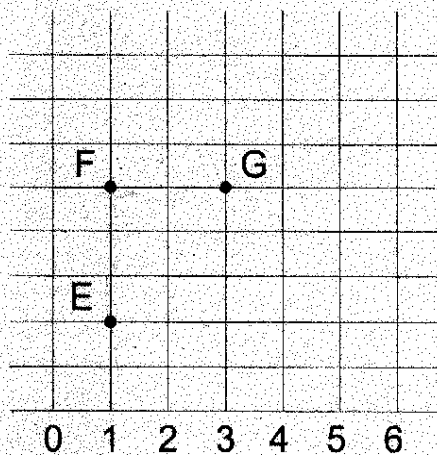
The triangle above has all sides equal. What is the size of each angle?

- A  $60^\circ$       B  $90^\circ$       C  $100^\circ$       D  $180^\circ$



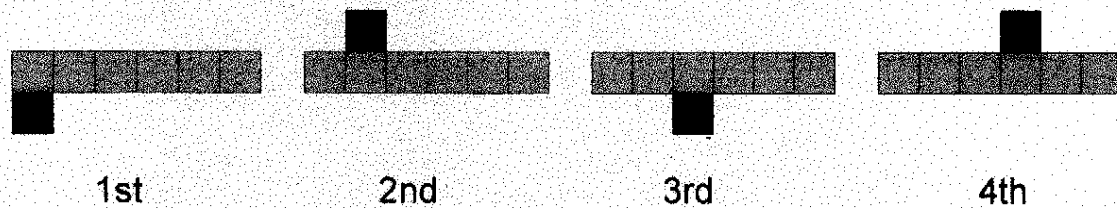
Which line segment in the circle above represents the diameter?

- A LO                      B OM                      C ON                      D LM

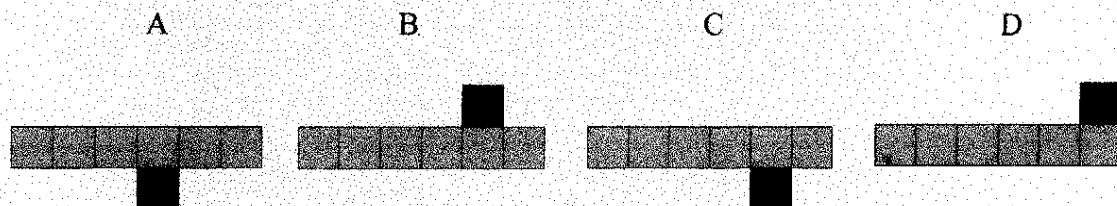


On the grid above, E is at position (1, 2) and G is at position (3, 5). What is the position of the point labelled F?

- A (5, 1)                      B (1, 5)                      C (3, 2)                      D (2, 3)



Based on the pattern above, which of the following would be the 5<sup>th</sup> diagram?





Which one of the following **DOES NOT** correctly match words and numbers?

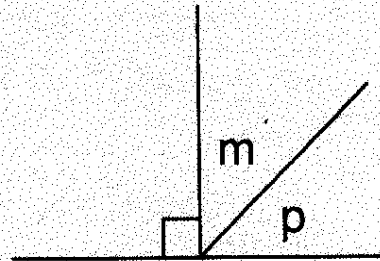
- A one hundred and eleven = 111
- B one thousand and one = 1001
- C one thousand and eleven = 1011
- D eleven thousand and one = 1101

50% of the cost of a book is \$30. How much does the book cost?

- A \$15                      B \$45                      C \$60                      D \$80

ALL of the following are number facts about 12 **EXCEPT**

- A 12 is one less than 13
- B 6 is half of 12
- C 8 is 4 more than 12
- D 12 is twice as large as 6

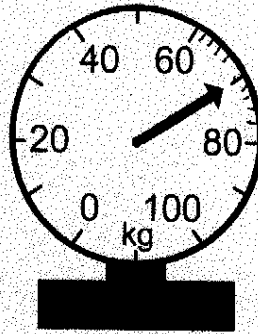


Which one of the following statements shows the relationship between the two angles, m and p, shown in the diagram above?

- A  $m + p = 90^\circ$                       B  $m - p = 90^\circ$   
C  $90^\circ + m = p$                       D  $90^\circ + p = m$

Levi went on holiday to England. He needed pocket money so he went to the bank and changed EC\$400 to pounds sterling.  $\text{EC}\$4 = \text{£}1$  How many pounds did he get from the bank?

- A £1600                      B £200                      C £100                      D £4

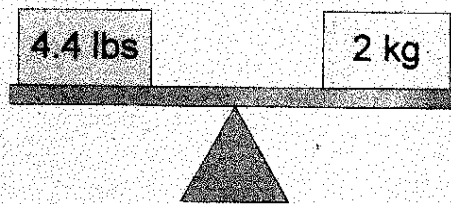


Which is the **BEST** estimate, in kg, for the measurement shown in the diagram above?

- A 65                      B 70                      C 85                      D 90

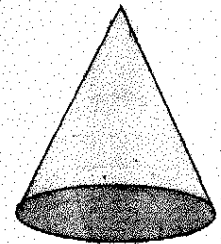
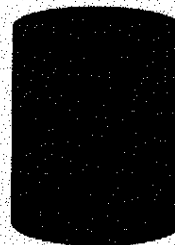
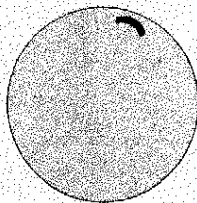
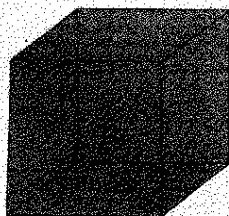
A man left  $\frac{1}{2}$  of his money for his wife,  $\frac{1}{4}$  for his son and the rest for his daughter. What fraction did he leave for his daughter?

- A  $\frac{1}{4}$                       B  $\frac{2}{5}$                       C  $\frac{1}{2}$                       D  $\frac{3}{4}$



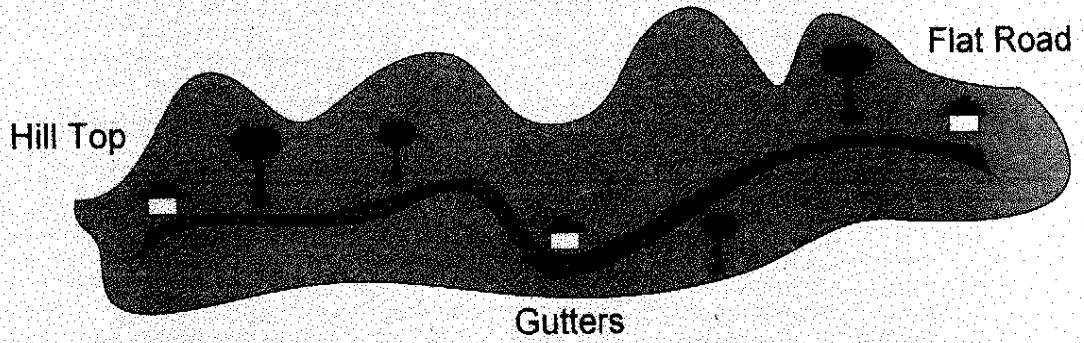
The diagram above shows that 4.4 lbs is the same as 2 kg. How many pounds are the same as 1kg?

- A 8.8lbs                      B 6.4 lbs                      C 4.6lbs                      D 2.2 lbs



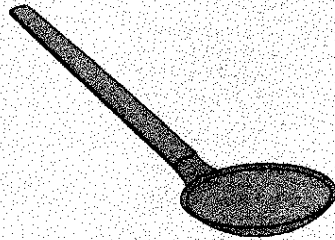
Which of the following represents the shapes in the order that they are given above?

- A cube, sphere, cylinder, cone  
 B sphere, cube, cone, cylinder  
 C cone, cylinder, sphere, cube  
 D cylinder, cone, cube, sphere



The diagram above shows three bus stops along a road. A bus leaves Hill Top at 11:05 and takes 35 minutes between stops. At what time does the bus get to Flat Road?

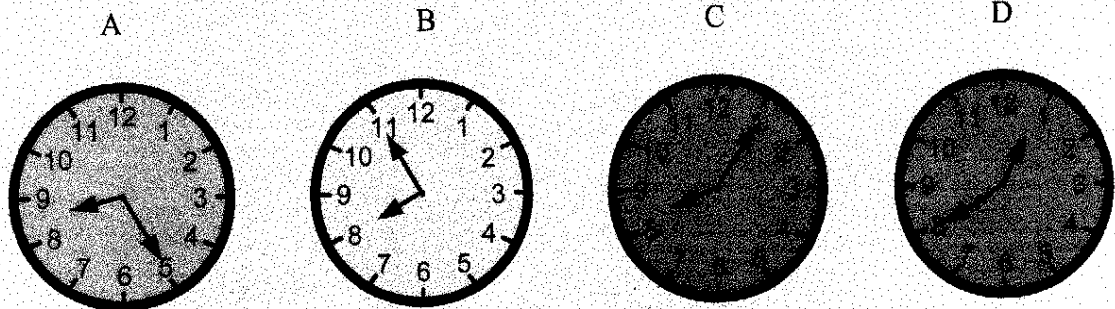
- A 11:40                      B 12:15                      C 12:50                      D 01:25



Which of the following units is **MOST** suitable for measuring the volume of water in the teaspoon shown above?

- A millilitre                      B centilitre                      C litre                      D kilolitre

Which of these clocks gives the same time as **08:05** ?



25% written as a fraction is;

A  $\frac{1}{25}$

B  $\frac{1}{5}$

C  $\frac{1}{4}$

D  $\frac{1}{2}$

**SALE! SALE! SALE!**

Bicycle on SALE for \$ 500  
10% Discount for  
cash purchase

John makes a cash purchase, using the information above. How much did he pay for the bicycle?

A \$490

B \$450

C \$400

D \$50

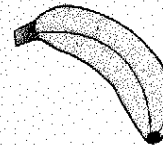
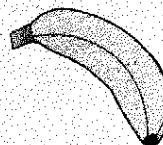
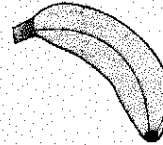
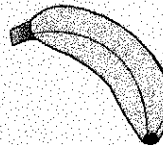
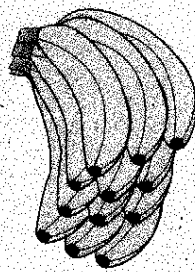
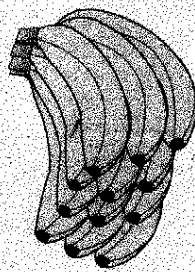
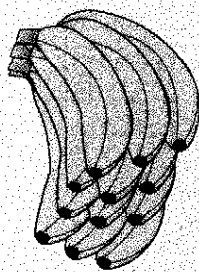
A farmer divides 1500 mangoes between two vendors in the ratio 2 : 3. Which of the following shows the number of mangoes that each vendor buys?

A (200, 300)

B (500, 1000)

C (600, 900)

D (1000, 1500)



Tia has three hands of bananas and 4 single bananas as shown above. Each hand has 12 bananas. Which of these number statements gives the total number of bananas that Tia has?

A  $3 \times 12 + 4$

B  $3 \times 12 \times 4$

C  $3(12 \times 4)$

D  $3(12 - 4)$

Susan had 10 marbles. Peter had twice as many marbles as Susan. Peter gave Susan 3 of his marbles. How many marbles does Peter have now?

- A 3                      B 10                      C 17                      D 20

Three numbers are such that the first number is half of the second and the third number is four times the first. Which of the following sets of numbers matches the statement above?

- A {5, 10, 20}              B {4, 8, 32}              C {6, 3, 24}              D {12, 24, 3}

Use the information in the table below to answer question 55.

Item	Price
Ripe banana	\$0.50 each
Melon	\$1.25 per slice

How much did Tiba pay for 2 bananas and one slice of melon?

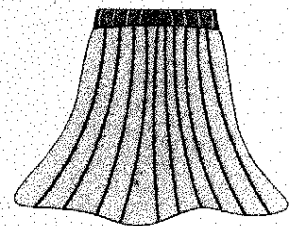
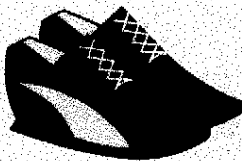
- A \$1.75                      B \$2.25                      C \$3.00                      D \$3.50

Bag  
\$ 15

Shoes  
\$ 25

Book  
\$ 10

Skirt  
\$ 50



Kim went to the store and bought two items. She paid with a \$100 bill and got back \$60 in change. Which two items of those pictured above did she buy?

- A shoes and bag              B shoes and book              C skirt and book              D skirt and bag

The table below shows the number of each type of animal on a farm. Use the table to answer questions 57 and 58.

Animal	Number
Pigs	20
Goats	
Sheep	10
Cows	13
<b>Total</b>	<b>68</b>

How many more pigs than cows are there on the farm?

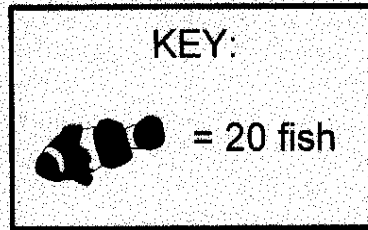
- A 7                      B 13                      C 20                      D 33

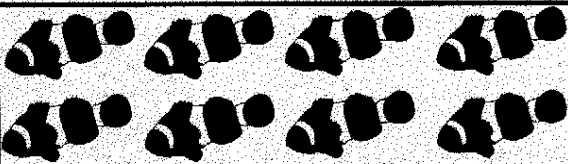

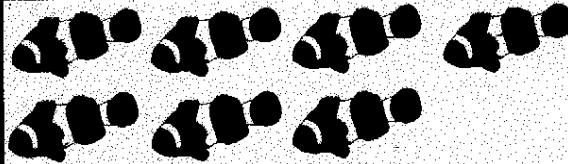
How many goats are there on the farm?

- A 0                      B 15                      C 25                      D 35

Four fishermen went out fishing. The Fisheries Department recorded how many fish each man caught.

Use the pictograph below to answer questions 59 and 60



Fisherman	Fish Caught	Total Number of fish
Peter		
Paul		
Simon		120
Tommy		

Simon caught 120 fish. How many fish should be drawn on the pictograph to represent Simon's catch?

- A 20                      B 12                      C 10                      D 6

How many fish did the men catch altogether?

- A 400                      B 500                      C 700                      D 800