



## PRIMARY 5 MID-YEAR EXAMINATION 2013

Name: \_\_\_\_\_ ( ) Date: 17 May 2013

Class: Primary 5 ( )

Time: 8.00 a.m. - 8.50 a.m.

Parent's Signature : \_\_\_\_\_

Marks: \_\_\_\_\_ / **100**

Paper 1 comprises 2 booklets, A and B.

# MATHEMATICS

## PAPER 1

### (BOOKLET A)

#### INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.
6. You are **not** allowed to use a calculator.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.  
For each question, four options are given. One of them is the correct answer. Make  
your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.  
(20 marks)

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1. In the numeral 346 890, the digit 3 stands for \_\_\_\_\_

- (1)  $3 \times 1\,000$
- (2)  $3 \times 10\,000$
- (3)  $3 \times 100\,000$
- (4)  $3 \times 1\,000\,000$

2. The numeral for 60 thousands, 20 hundreds and 3 ones is \_\_\_\_\_

- (1) 6 023
- (2) 60 203
- (3) 62 003
- (4) 602 003

3. Amy paid \$216 for 12 dolls. What was the cost of one doll?

- (1) \$20
- (2) \$18
- (3) \$15
- (4) \$13

4. What is the value of  $5 - 1\frac{7}{9}$  ?

(1)  $3\frac{2}{9}$

(2)  $4\frac{2}{9}$

(3)  $4\frac{7}{9}$

(4)  $6\frac{7}{9}$

5. Alice saves \$5. Mary saves \$3 more than Alice.  
What fraction of their total savings is Mary's savings?

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

(2)  $\frac{3}{8}$

(3)  $\frac{3}{13}$

(4)  $\frac{8}{13}$

6. Mark's age is  $\frac{2}{5}$  of Mr Tan's age.

Find the ratio of Mr Tan's age to Mark's age.

(1) 5 : 2

(2) 2 : 5

(3) 3 : 5

(4) 5 : 3

7. 3 000 people visited the Zoological Gardens on Friday and Saturday. There were 600 more visitors on Saturday than on Friday.

How many visitors were there on Friday?

- (1) 1 200
- (2) 1 800
- (3) 2 400
- (4) 3 600

8.  $5 \times 18 \times 2 + 12 \times 10 = \square \times 10$

What is the missing number in the box?

- (1) 216
- (2) 192
- (3) 60
- (4) 30

9. Adrian has 282 photographs. He wants to buy some photo albums to keep his photographs. If each album can hold at most 40 photographs, what is the **minimum** number of albums Adrian needs to buy to keep all his photographs?

- (1) 9
- (2) 8
- (3) 7
- (4) 6

10. Study the number pattern below.

What is the missing fraction in the box?

$$1\frac{1}{7}, 2\frac{3}{7}, \boxed{\phantom{00}}, 5$$

(1)  $1\frac{2}{7}$

(2)  $2\frac{2}{7}$

(3)  $3\frac{5}{7}$

(4)  $4\frac{5}{7}$

11. Edward has the same number of ten-cent and fifty-cent coins. The total value is \$6. How many fifty-cent coins does he have in all?

(1) 5

(2) 10

(3) 12

(4) 20

12. A cup is  $\frac{1}{3}$  full of water. The water is then poured into an empty jug which can contain twice the <sup>capacity</sup> amount of water in the cup. What fraction of the jug is not filled with water?

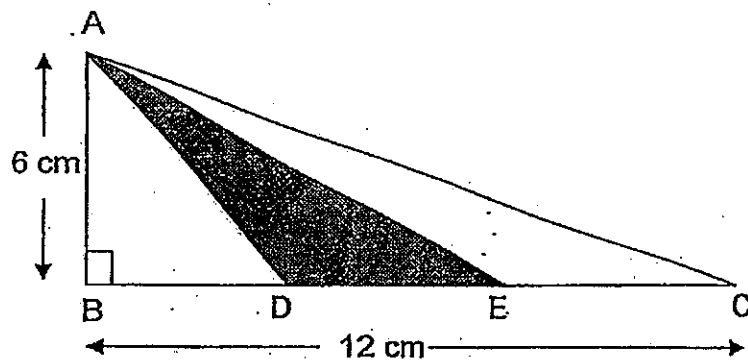
(1)  $\frac{1}{3}$

(2)  $\frac{2}{3}$

(3)  $\frac{1}{6}$

(4)  $\frac{5}{6}$

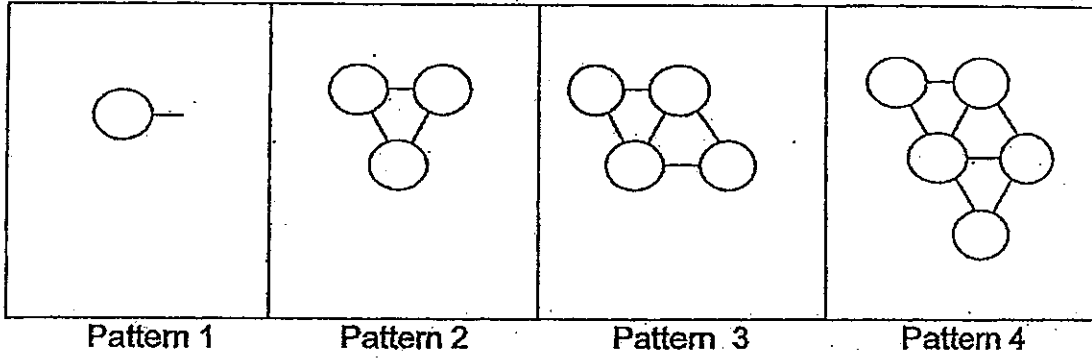
13. In the figure below, not drawn to scale, ABC is a triangle. BC is 3 times as long as DE. If BC = 12 cm, find the shaded area.



- (1)  $12 \text{ cm}^2$   
(2)  $24 \text{ cm}^2$   
(3)  $36 \text{ cm}^2$   
(4)  $72 \text{ cm}^2$
14. A rope of length 4.7 metres was cut into 8 equal pieces.  
Find the length of each piece, corrected to 2 decimal places.

- (1) 0.50 m  
(2) 0.58 m  
(3) 0.59 m  
(4) 0.60 m

15. The pattern below is formed by using circles and lines.



How many lines are needed to make the 10<sup>th</sup> pattern?

- (1) 9
- (2) 12
- (3) 18
- (4) 19

- End of Booklet A -



## PRIMARY 5 MID-YEAR EXAMINATION 2013

Name : \_\_\_\_\_ (     )

Date: 17 May 2013

Class : Primary 5 (     )

Time: 8.00 a.m. - 8.50 a.m.

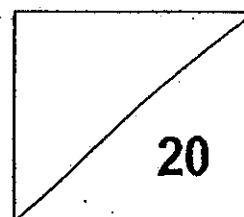
Parent's Signature : \_\_\_\_\_

Paper 1 comprises 2 booklets, A and B.

# MATHEMATICS

## PAPER 1

### (BOOKLET B)



### INSTRUCTIONS TO CANDIDATE

1. Write your name, class and register number.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.
6. You are **not** allowed to use a calculator.



Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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16. Write the following number in words.

8 304 019

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

17. Round off 142 394 to the nearest thousand?

Ans: \_\_\_\_\_

18. What is the value of  $52 + (46 - 10) \div 3 \times 2$  ?

Ans: \_\_\_\_\_

19.

$$\begin{array}{r} 689 \\ 15 \overline{) 103 \square 5} \end{array}$$

What is the missing number in the box?

Ans: \_\_\_\_\_

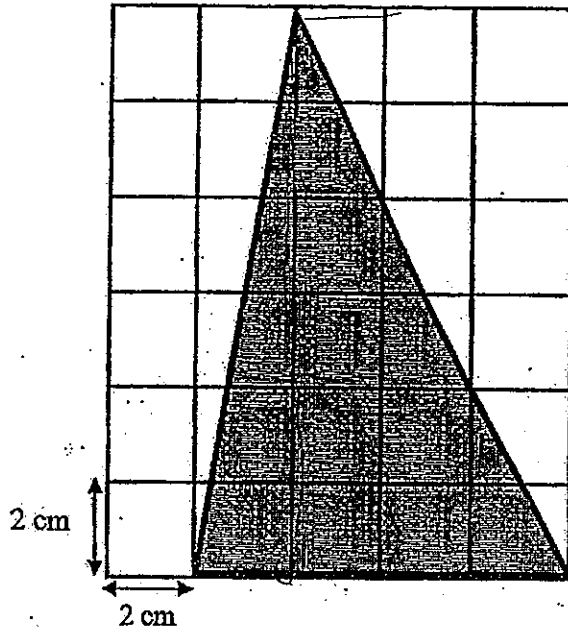
20. Arrange the following fractions in ascending order.

Ans: \_\_\_\_\_

21. Find the difference between  $3\frac{5}{6}$  and  $5\frac{3}{4}$ .

Ans: \_\_\_\_\_

22. The following grid is made up of 2-cm squares.  
Find the area of the shaded triangle.



Ans: \_\_\_\_\_  $\text{cm}^2$

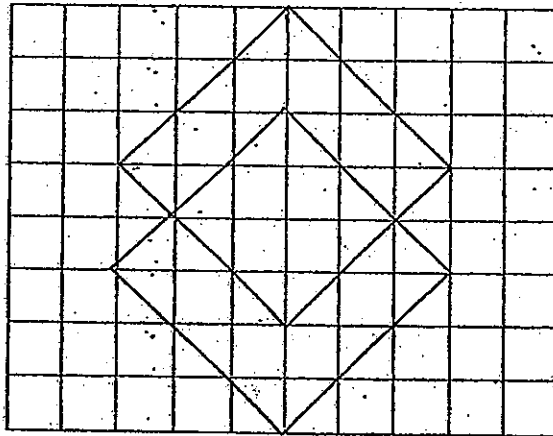
23. A ribbon 50 cm long is cut into 2 pieces in the ratio of 3 : 7.  
Find the length of the shorter piece.

Ans: \_\_\_\_\_ cm

24. At a party, the ratio of the number of boys to the number of girls is 4 : 3.  
If there were 18 girls, how many more boys than girls were at the party?

Ans: \_\_\_\_\_

25. How many lines of symmetry does the figure have?



Ans: \_\_\_\_\_

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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26. The sum of 2 numbers is 986. The difference between the two numbers is 212.  
Find the greater number.

Ans: \_\_\_\_\_

27. If John spends \$22 every day, the money he has will last him for 2 weeks.  
How many days will his money last him if he were to spend \$7 a day?

Ans: \_\_\_\_\_

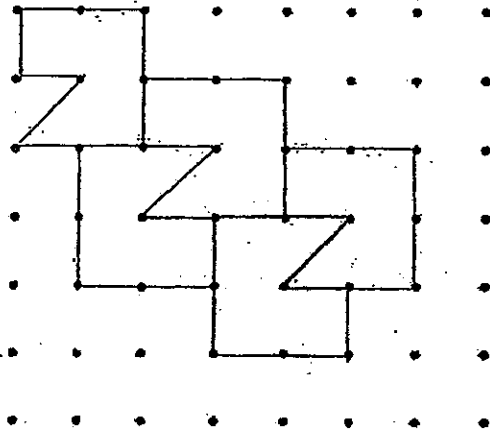
28. Ryan had 3 times as many marbles as Sam. How many marbles must Ryan give to Sam so that each of them will have 150 marbles?

Ans: \_\_\_\_\_

29.  $\frac{1}{6}$  of a class of pupils celebrate their birthdays in November.  $\frac{1}{3}$  of the class of pupils celebrate their birthdays in December. 2 pupils celebrate their birthdays in each of the remaining 10 months. How many pupils were there in the class?

Ans: \_\_\_\_\_

30. Use the given shape to form a tessellation in the space provided.  
Draw 3 more of the given shape.



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END OF PAPER



**PRIMARY 5 MID-YEAR EXAMINATION 2013**

Name : \_\_\_\_\_ (      ) Date: 17 May 2013

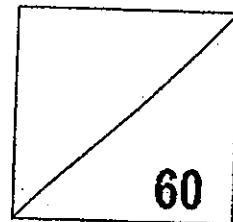
Class : Primary 5 (      )

Time: 10.00 a.m. – 11.40 a.m.

Parent's Signature : \_\_\_\_\_

**MATHEMATICS**

**PAPER 2**



**INSTRUCTIONS TO CANDIDATE**

1. Write your name, class and register no.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Show your working clearly as marks are awarded for correct working.
6. You are allowed to use a calculator.



Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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1. Megan is 2 times as old as her sister. Four years from now, the sum of their ages will be 35 years. How old is Megan's sister now?

Ans: \_\_\_\_\_ years old

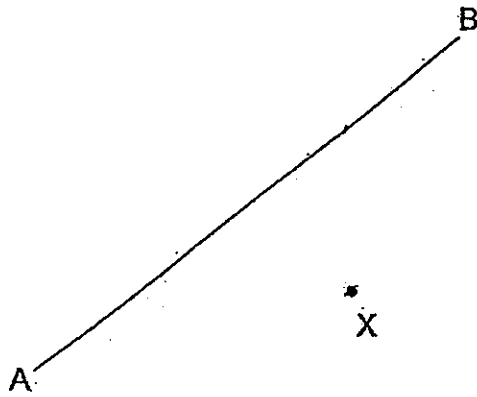
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2. The number of green marbles is  $\frac{3}{5}$  the number of yellow marbles. The number of green marbles is half the number of blue marbles. What fraction of the marbles are yellow?

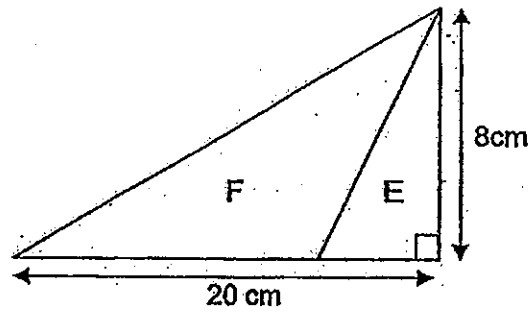
Ans: \_\_\_\_\_

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3. Draw a line parallel to AB through the point X.



4. In the figure below, not drawn to scale, the area of Triangle E is  $\frac{1}{4}$  of the area of Triangle F. What is the area of Triangle E?



Ans: \_\_\_\_\_ cm<sup>2</sup>

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5.  $\frac{1}{2}$  of Sally's collection of stamps is equal to  $\frac{3}{4}$  of Ellen's stamps.

What fraction of Sally's stamps is Ellen's stamps?

Ans: \_\_\_\_\_

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For questions 6 to 18, show your working clearly in the space provided for 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-question. (50 marks)

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6. Container A contains 34 pencils and Container B contains 22 pencils. How many pencils must be transferred from Container A to Container B so that there is an equal number of pencils in each container?

Ans: \_\_\_\_\_ [3]

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7. Vera saves \$2 every day. For every \$12 she saves, her father will give her another \$3. How many days does she take to collect \$225?

Ans: \_\_\_\_\_ [3]

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8. The table below shows the bicycle rental charges at a park.

Duration	Charges
1 <sup>st</sup> hour or part thereof	\$4.00
Subsequent half hour or part thereof	\$1.50

- (a) Daniel cycled from 10 a.m. to 11.10 a.m. How much did he pay?  
(b) If Shawn paid \$7, what was the maximum amount of time he could cycle?

Ans: (a) \_\_\_\_\_ [1]  
(b) \_\_\_\_\_ [2]

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9. Mr Taufik has 3 pieces of wire of length 12m, 18m and 30m. He wants to cut them into shorter equal pieces. What is the greatest possible length of each piece of cut wire?

Ans: \_\_\_\_\_ [3]

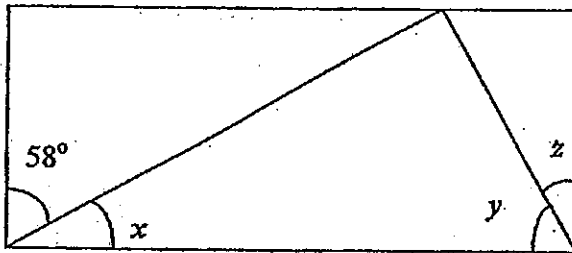
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10. The length of a rectangular pond is 14 m and its breadth is 7 m. Fatimah wants to build a running path around the pond. The width of the path is  $\frac{1}{2}$  m. What is the area of the running path?

Ans: \_\_\_\_\_ [3]

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11. In the rectangle below, not drawn to scale, the value of  $\angle z$  is  $\frac{3}{4}$  of  $\angle x$ .  
What is  $\angle y$ ?



Ans: \_\_\_\_\_ [3]

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12. A bag and a belt cost \$70. A bag and a watch cost \$250. The watch cost 5 times as much as the belt. Find the cost of the bag.

Ans: \_\_\_\_\_ [4]

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13. Three friends, Andy, Barney and Candy donated a sum of \$800 to charity.

$\frac{1}{2}$  of the amount of money was donated by Andy. Barney's donation was  $\frac{2}{3}$  the amount given by Candy. How much money did Candy donate?

Ans: \_\_\_\_\_ [4]

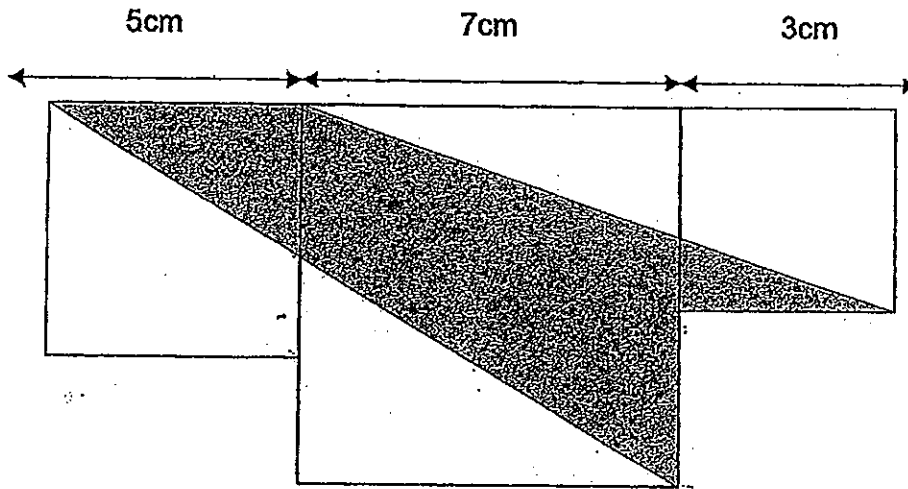


14. In a school science fair, there were exhibits from Class A, Class B and Class C. Altogether, 25 exhibits came from Class B and Class C. If a total of 16 exhibits were not from Class C and a total of 15 exhibits were not from Class B, how many exhibits were there altogether? . . . . .

Ans: \_\_\_\_\_ [4]

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15. The figure below, not drawn to scale, shows 3 squares of side 5 cm, 7 cm and 3 cm. Find the area of the shaded part.



Ans: \_\_\_\_\_ [5]

16. There are some mangoes in 3 baskets, A, B and C.  $\frac{2}{5}$  of the number of mangoes in Basket A is equal to  $\frac{1}{4}$  of the number of mangoes in Basket B. The number of mangoes in Basket C is  $\frac{1}{3}$  of the number of mangoes in Basket B.

(a) If  $\frac{1}{2}$  of the mangoes in Basket B are taken out and placed in Basket C, there will be 36 mangoes left in Basket B. How many mangoes are there in Basket

A?

(b) What is the total number of mangoes in the 3 <sup>baskets</sup> ~~boxes~~?

Ans: (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [2]

17. Mrs Lim baked some cupcakes for sale. The first customer bought  $\frac{1}{3}$  of the cupcakes and received 8 cupcakes free. The second customer bought  $\frac{7}{10}$  of the remaining cupcakes and received 3 cupcakes free. Mrs Lim then had 12 cupcakes left. How many cupcakes did Mrs Lim bake at first?

Ans: \_\_\_\_\_ [5]

18. Study the number pattern below.

Rows	Number(s)								
1	2								
2	4      6      8								
3	10    12    14    16    18								
4	20    22    24    X    28    30    32								
5	34    36    38    40    42    44    46    48    50								

- (a) What would be the value of X?  
 (b) What is the largest number in Row 10?  
 (c) 288 is the largest number in a certain row. Which row is it?

Ans: (a) \_\_\_\_\_ [1]  
 (b) \_\_\_\_\_ [2]  
 (c) \_\_\_\_\_ [2]

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END OF PAPER



# ANSWER SHEET

**EXAM PAPER 2013**

**SCHOOL : TAO-NAN**

**SUBJECT : PRIMARY 5 MATHEMATICS**

**TERM : SA1**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
3	3	2	1	4	1	1	4	2	3	2	4	1	3	4

16) Eight million, three hundred and four thousand and nineteen.

17) 142000      18) 76      19) 3      20)  $\frac{3}{5}$ ,  $\frac{5}{7}$ ,  $\frac{7}{9}$ ,  $\frac{11}{12}$

21)  $\frac{11}{12}$       22) 48cm<sup>2</sup>      23) 15cm      24) 6      25) 2

26) 599      27) 44 days      28) 75 marbles      29) 40      30)

## Paper 2

1)  $4 \times 2 = 8$

$35 - 8 = 27$

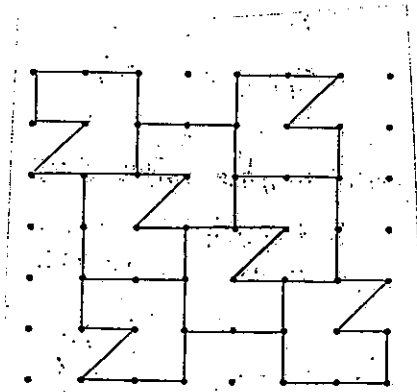
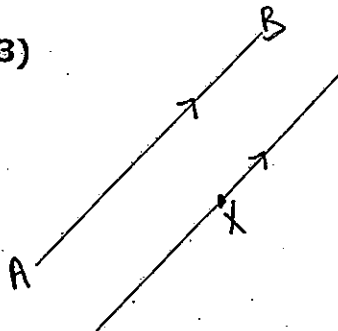
$27 \div 3 = 9$  years old

2)  $3 + 5 + 6 = 14$

$14 - 6 - 3 = 5$

5/14 of the marbles are yellow.

3)



$$4) \frac{1}{2} \times 20 \times 8 = 80$$

$$1 + 4 = 5$$

$$80 \div 5 = 16$$

$$16 \times 1 = 16 \text{ cm}^2$$

$$5) 6 + 4 = 10$$

$$10 - 4 = 6$$

$$4/6 = 2/3$$

$$6) 34 + 22 = 56$$

$$56 \div 2 = 28$$

$$28 - 22 = 6 \text{ pencils}$$

$$7) 12 + 3 = 15$$

$$225 \div 15 = 15$$

$$12 \div 2 = 6$$

$$6 \times 15 = 90 \text{ days}$$

$$8) a) 4 + 1.50 = \$5.50$$

$$b) 7 - 4 = 3$$

$$3 \div 1.50 = 2$$

$$2 \times 30 = 60 \text{ minutes} \rightarrow 1 \text{ h}$$

$$1 + 1 = 2 \text{ hours}$$

$$9) 12 \div 2 = 6$$

$$18 \div 6 = 3$$

$$30 \div 6 = 5$$

The greatest possible length of each piece of cut wire is 6 metres.

$$10) 7 + \frac{1}{2} + \frac{1}{2} = 8$$

$$14 + \frac{1}{2} + \frac{1}{2} = 15$$

$$15 \times 8 = 120$$

$$14 \times 7 = 98$$

$$120 - 98 = 22$$

$$11) 90 - 58 = 32$$

$$32 \div 4 = 8$$

$$8 \times 3 = 24$$

$$90 - 24 = 66^\circ$$

$$12) 250 - 70 = 180$$

$$180 \div 4 = 45$$

$$70 - 45 = \$25$$



13)  $2 + 3 = 5$   
 $5 + 5 = 10$   
 $800 \div 10 = 80$   
 $80 \times 3 = 240$

14)  $16 - 15 = 1$   
 $25 - 1 = 24$   
 $24 \div 2 = 12$   
 $12 + 1 = 13$   
 $15 - 12 = 3$   
 $13 + 12 + 3 = 28$  exhibits

15)  $3 + 2 + 2 = 7$   
 $5 + 7 = 12$   
 $\frac{1}{2} \times 7 \times 12 = 42$   
 $7 + 3 = 10$   
 $\frac{1}{2} \times 10 \times 3 = 15$   
 $42 + 15 = 57$   
 $2 \times 5 = 10$   
 $57 - 10 = 47$   
 $5 \times 5 = 25$   
 $7 \times 7 = 49$   
 $3 \times 3 = 9$   
 $49 + 25 + 9 = 83$   
 $83 - 47 = 36\text{cm}^2$

16)a)  $2 \times 4 = 8$   
 $8 \times 3 = 24$   
 $24 \div 3 = 8$   
 $24 \div 2 = 12 \rightarrow 36$  mangoes  
 $36 \div 12 = 3$   
 $5 \times 3 = 15$   
 $15 \times 3 = 45$  mangoes  
b)  $36 \times 2 = 72$   
 $8 \times 3 = 24$   
 $45 + 72 + 24 = 141$  mangoes

17)  $12 + 3 = 15 \rightarrow 3/10$

$15 \div 3 = 5$

$5 \times 10 = 50$

$50 + 8 = 58 \rightarrow 2/3$

$58 \div 2 = 29$

$29 \times 3 = 87$  cupcakes

18)a)  $22 - 20 = 2$

$24 + 2 = 26$

b) 200

c) Row 12