



Anglo-Chinese School (Primary)

END-OF-YEAR EXAMINATION 2011  
MATHEMATICS  
PAPER 1 (BOOKLET A)  
PRIMARY FIVE

Name: \_\_\_\_\_ (     )     Class: Primary 5 \_\_\_\_

Date: 2 November 2011

Duration of Booklet A & B: 50min

**INSTRUCTIONS TO CANDIDATES**

1. This question paper consists of 7 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Shade your answer on the Optical Answer Sheet (OAS) provided.
5. You are not allowed to use a calculator.



Questions 1 to 10 carry 1 mark each. Question 11 to 15 carry 2 marks each.  
Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).  
(20 marks)

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1. Find the value of  $13 + 52 \times 12 - 8$ .
  - 1) 229
  - 2) 260
  - 3) 629
  - 4) 722
  
2. Find the value of  $6.09 \times 80$ .
  - 1) 4.872
  - 2) 48.72
  - 3) 487.2
  - 4) 4 872
  
3. Express 2.5 m as a percentage of 500 cm.
  - 1) 5%
  - 2) 20%
  - 3) 50%
  - 4) 500%
  
4. Jay has 108 Star Wars figurines. He gave  $\frac{1}{3}$  of the figurines to his sister and  $\frac{1}{4}$  of them to his brother. How many figurines did he have left?
  - 1) 45
  - 2) 63
  - 3) 72
  - 4) 81

5. Calvin is  $\frac{5}{9}$  as heavy as Danny. If their total mass is 126 kg, what is Calvin's mass?

- 1) 14 kg
- 2) 45 kg
- 3) 56 kg
- 4) 70 kg

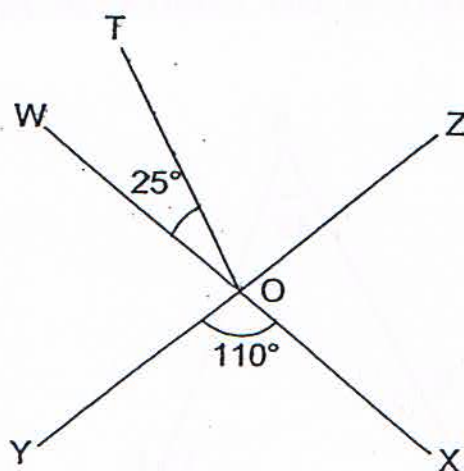
6. 2 students pay a total of \$0.90 to play a game at the carnival. How much would a class of 40 students pay altogether to play the game?

- 1) \$ 3.60
- 2) \$ 18
- 3) \$ 36
- 4) \$ 40.90

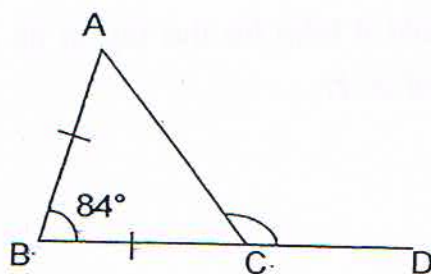
7. The ratio of the lengths of two ribbons is 1 : 9. If their difference in length is 312 cm, find the length of the longer ribbon.

- 1) 31.2
- 2) 39
- 3) 351
- 4) 390

8. In the figure below not drawn to scale,  $WOX$  and  $YOZ$  are straight lines. Find  $\angle TOZ$ .

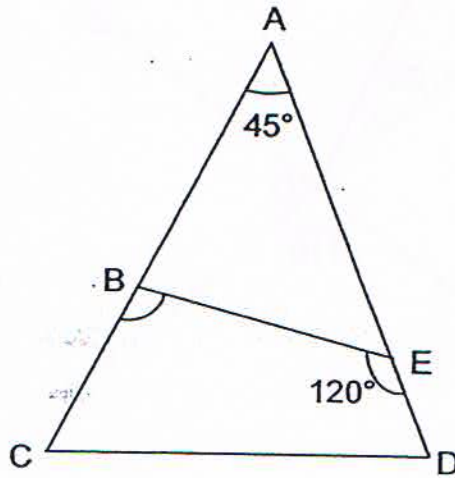


- 1)  $70^\circ$
  - 2)  $85^\circ$
  - 3)  $135^\circ$
  - 4)  $155^\circ$
9. In the figure below not drawn to scale,  $ABC$  is an isosceles triangle.  $\angle ABC = 84^\circ$  and  $BD$  is a straight line. Find  $\angle ACD$ .



- 1)  $48^\circ$
- 2)  $96^\circ$
- 3)  $132^\circ$
- 4)  $168^\circ$

10. In the figure below not drawn to scale, ABC and AED are straight lines.  
 $\angle BAE = 45^\circ$  and  $\angle BED = 120^\circ$  Find  $\angle CBE$ .



- 1)  $60^\circ$
  - 2)  $75^\circ$
  - 3)  $105^\circ$
  - 4)  $120^\circ$
11. A tap took 12 minutes to fill up a container with a capacity of 4 l. At the same rate, how long would it take for the tap to fill up 50% of another container with a capacity of 26 l?
- 1) 36 min
  - 2) 39 min
  - 3) 52 min
  - 4) 78 min



12. Claudia had a sum of money. If she bought 188 cards, she would have \$42 left. If she bought 164 cards, she would have \$90 left. How much money did she have at first?

- 1) 328
- 2) 334
- 3) 376
- 4) 418

13. A container of base 18 m by 11 m was filled with water to a height of 8 m. When water from the container is used to fill up 3 empty bottles to the brim, the water level in the container dropped to  $\frac{3}{8}$  of its original height. Find the volume of 5 such bottles.

- 1) 330 m<sup>3</sup>
- 2) 990 m<sup>3</sup>
- 3) 1 650 m<sup>3</sup>
- 4) 1 782 m<sup>3</sup>

14. The charges for renting a car are given in the box below. Mr Yeo rented a car at 11.50 a.m. He returned it at 2.05 p.m. on the same day. How much did Mr Yeo pay for renting the car?

CAR RENTAL	
For the first hour	\$80
For every additional $\frac{1}{2}$ hour or part thereof	\$40

- (1) \$120  
(2) \$160  
(3) \$200  
(4) \$240
15. When Yanling increases her savings by 50% and Serene decreases hers by 75%, both of them will save the same amount which is \$240. How much are their total savings at first?

- 1) \$480  
2) \$800  
3) \$960  
4) \$1 120





Anglo-Chinese School (Primary)

END-OF-YEAR EXAMINATION 2011  
MATHEMATICS  
PAPER 1 (BOOKLET B)  
PRIMARY FIVE

Name: \_\_\_\_\_ (     )     Class: Primary 5 \_\_\_\_\_

Date: 2 November 2011

Duration of Paper Booklet A & B: 50 min

\_\_\_\_\_  
Parent's/Guardian's signature

**INSTRUCTIONS TO CANDIDATES**

1. This question paper consists of 8 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. You are not allowed to use a calculator.

Section	Maximum Marks	Marks Obtained
Paper 1 Booklet A. Multiple-Choice Questions	20	
Paper 1 Booklet B. Short Answers: Part 1	10	
Paper 1 Booklet B. Short Answers: Part 2	10	
Total Marks	40	

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

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16. Express 809 hundredths as a decimal.

Answer: \_\_\_\_\_

17. Find the sum of  $\frac{1}{4}$  of 400 g and  $\frac{1}{4}$  of 4 kg.

Answer: \_\_\_\_\_ kg

18. Find the value of  $\frac{3}{7} \div 7$ . Express your answer as a decimal correct to 2 decimal places.

Answer: \_\_\_\_\_

19. Owen spends 20% of a day studying. How many hours does he study in each day? Give your answer as a mixed fraction in its simplest form.

Answer: \_\_\_\_\_

20. The average age of 3 girls is 5 years 4 months and the average age of 2 boys is 9 years 11 months. Find the total age of the 5 children.

Answer: \_\_\_\_\_ yr \_\_\_\_\_ mth

21.  $\frac{1}{3}$  of Winnie's father's age is equal to twice her age. What is the ratio of Winnie's age to her father's age?

Answer: \_\_\_\_\_

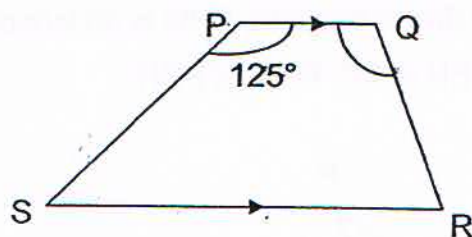
22. A basket of eggs was shared among Alan, Brian and Cathy in the ratio 4 : 5 : 6. Brian received 660 eggs. How many more eggs did Cathy receive as compared to Alan?

Answer: \_\_\_\_\_

23. The average marks of 4 students in a Math exam is 81. If the average marks of 3 students is 76, how many marks did the 4<sup>th</sup> student score?

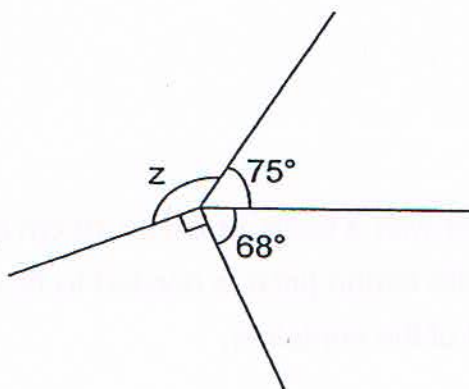
Answer: \_\_\_\_\_

24. In the figure below not drawn to scale, PQRS is a trapezium.  
 $\angle SPQ = 125^\circ$  and  $\angle PSR$  is half of  $\angle PQR$ . Find  $\angle PQR$ .



Answer: \_\_\_\_\_°

25. The figure below is not drawn to scale. Find  $\angle z$ .

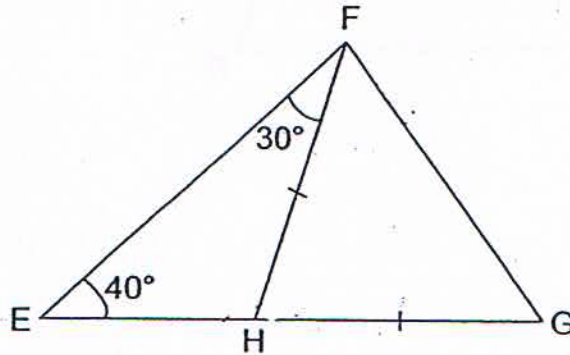


Answer: \_\_\_\_\_°



Questions 26 to 30 carry 2 marks each. Show all mathematical statements clearly in the space below each question and write your answers in the spaces provided.  
(10 marks)

26. In the figure below not drawn to scale,  $FHG$  is an isosceles triangle.  
 $\angle EFH = 30^\circ$  and  $\angle FEH = 40^\circ$ . Find  $\angle FGH$ .



Answer: \_\_\_\_\_°

27. A container with a base 14 cm by 10 cm is filled with 0.46 l of lemon juice. If 0.8 l more lemon juice is needed to fill up the container completely, find the height of the container.

Answer: \_\_\_\_\_ cm



28. Jay used  $\frac{2}{5}$  of his money to buy 10 pencils and 3 pens. Each pencil cost  $\frac{1}{2}$  as much as a pen. How many pens could he buy with the remaining of his money?

Answer: \_\_\_\_\_

29. 9 friends pay equally for a meal that cost \$63.82 at a restaurant. How much does each person have to pay? Round off your answer to the nearest 10 cents.

Answer: \$ \_\_\_\_\_

30. There were a total of 370 chocolates and sweets in a box. There were 4 times as many chocolates as sweets. After 82 chocolates and sweets were taken out of the box, there were 3 times as many chocolates as sweets left. How many sweets were taken out of the box?

Answer: \_\_\_\_\_

**End-of-Paper**



Anglo-Chinese School (Primary)

END-OF-YEAR EXAMINATION 2011  
MATHEMATICS  
PAPER 2  
PRIMARY FIVE

Name: \_\_\_\_\_ (      )

Class: Primary 5 \_\_\_\_

Date: 2 November 2011

Duration of Paper 2: 1h 40min

\_\_\_\_\_  
Parent's/Guardian's signature

**INSTRUCTIONS TO CANDIDATES**

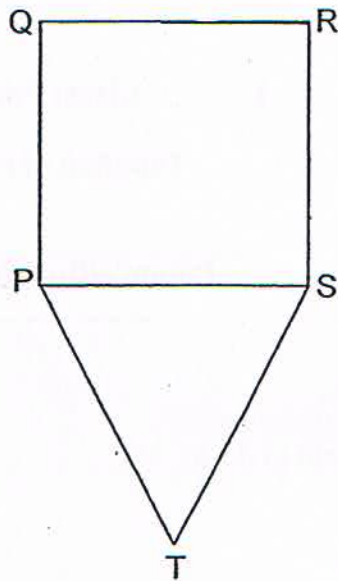
1. This question paper consists of 15 printed pages.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. You are allowed to use a calculator.

Section	Maximum Marks	Marks Obtained
Paper 2 Section B. Short Answers: Part 2	10	
Paper 2 Section C. Problem Sums	50	
Total Marks	60	

Questions 1 to 5 carry 2 marks each. Show your mathematical statements clearly in the space provided for each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

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1. The figure PQRST as shown below is made up of an equilateral triangle and a square. If the area of square PQRS is  $144 \text{ cm}^2$ , find the perimeter of PQRST.



Answer: \_\_\_\_\_ cm

2. Claire bought an equal number of forks and spoons for \$489.60. Each spoon cost \$3.40 and each fork cost \$2.80 more than each spoon. How many forks did he buy?

Answer: \_\_\_\_\_

3. The sum of  $\frac{7}{12}$  of a number and  $\frac{3}{4}$  of the same number is 624.  
What is the number?

Answer: \_\_\_\_\_



4. Lucas spends 40% of his salary and saves the rest every month. If his salary is increased by 20% in September, he would spend \$1 188. How much is his salary in August?

Answer: \$ \_\_\_\_\_

5. Ming has 2.5 times as much money as Olivia. Evelyn has \$21 less than Ming. They have a total of \$327. How much does Evelyn have?

Answer: \$ \_\_\_\_\_



For questions 6 to 18, show your steps 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. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (50 marks)

6. Nitin could buy 8 packets of potato chips and 5 bottles of coke with \$19.80. With the same amount of money, he could buy 18 such packets of potato chips. If he only wants to buy coke, how many bottles of cokes can he buy with \$55?

Answer: \_\_\_\_\_ [3]

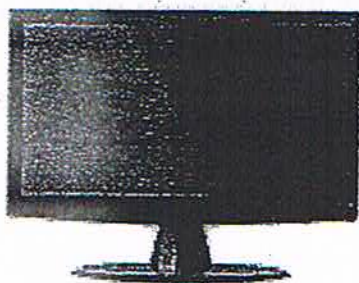
7. Ewan had  $\frac{1}{2}$  as many orange as apples. He sold 40 oranges and bought 70 more apples. Now, he has 190 more apples than oranges. How many apples did he have at the beginning?

Answer: \_\_\_\_\_ [3]

8. Jaslyn has two strings of equal length. One string is blue and the other is green in colour. After cutting, 2.2 m of the blue string and 3.6 m of the green string, the length of the blue string is 1.5 times that of the green string. Find the original length of the green string.

Answer: \_\_\_\_\_ [3]

9. Every customer at a shop has to pay a 7% GST on their purchases. The original price of a television set without GST is \$1 650 as shown in the figure. At a sale, the television set is sold at a discount of 10% of its original price. What is the amount of money a customer has to pay for buying the television set at the sale? -



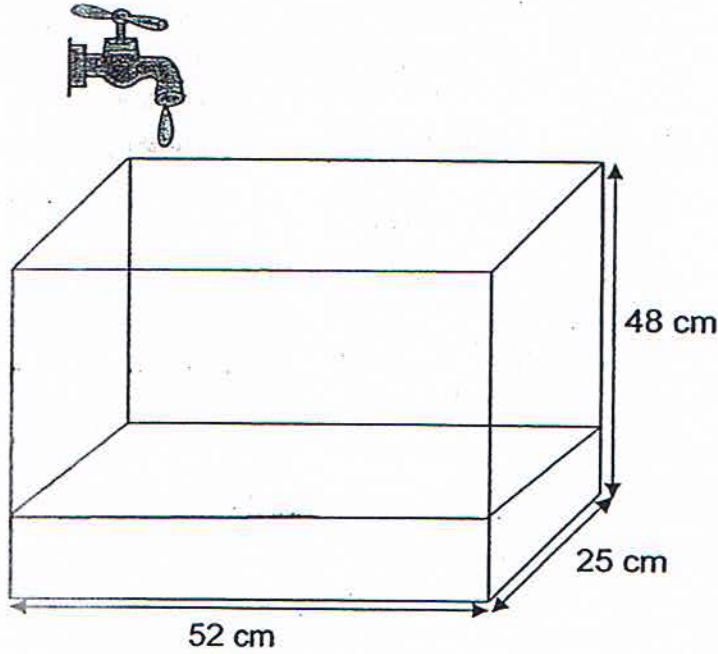
\$1 650

Answer: \_\_\_\_\_ [3]

10. The ratio of Jane's savings to Matz's savings is  $5 : 2$ . When Jane gives \$25 to Matz, she still has \$55 more than him. What was Jane's original savings?

Answer: \_\_\_\_\_ [3]

11. In the figure below, a fish tank measuring 52 cm by 25 cm by 48 cm contained 2 720 ml of water. Sandy then turned on a tap that flows at a rate of 4.32 l per minute. How long does it take for the tank to be  $\frac{2}{3}$  filled with water? Give your answer in minutes.



Answer: \_\_\_\_\_ [4]

12. At first, Daniel had 185 twenty-six-cent stamps. After giving 30 stamps to Elijah, they both have the same number of stamps.

(a) How many stamps did Elijah have at first?

(b) Among the stamps that Elijah have at first,  $\frac{2}{5}$  of them were

fifty-five-cent and the rest were twenty-six-cent stamps. How many twenty-six-cent stamps did both Daniel and Elijah have altogether?

Answer: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [3]

13. Bryan's marks for English and Science are in the ratio 6 : 5. His Mathematics marks is  $\frac{7}{8}$  of his Science marks. The total marks for his Mathematics and English is 166.

- (a) Find his marks for English.
- (b) What is the average mark of the 3 subjects?

Answer: (a) \_\_\_\_\_ [2]

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



14. There were 864 more chocolate muffins than banana muffins in a shop. After  $\frac{1}{6}$  of the chocolate muffins and  $\frac{3}{4}$  of the banana muffins were sold, there were 1 728 more chocolate muffins than banana muffins left. How many chocolate muffins were there at first?

Answer: \_\_\_\_\_ [4]

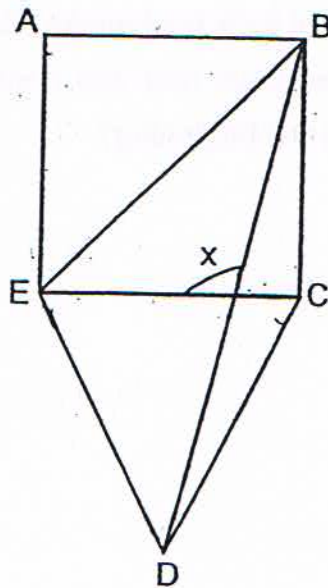
15. In a school library, 48% of the books were English books, 25% of the remaining books were Malay books and the rest of the books were Chinese books. Given that there were 897 Chinese books,

- (a) how many books are there in the library in all?
- (b) how many Malay books were there?

Answer: (a) \_\_\_\_\_ [2]

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

16. In the figure below, not drawn to scale, ABCE is a square and EDC is an equilateral triangle. Find  $\angle x$ .



Answer: \_\_\_\_\_ [5]

17. Ryan, Sean and Tristan collected a total of 492 bookmarks. Ryan had the least number of bookmarks. At first, the ratio of the number of bookmarks Sean had to the ratio of bookmarks Tristan had was 3 : 2. After Ryan and Sean each gave away 50% of their bookmarks, Sean had 74 bookmarks more than Ryan. If the three boys had 326 bookmarks left, how many bookmarks did Ryan have in the beginning?

Answer \_\_\_\_\_ [5]

18. Mrs Ho had 2 boxes of oranges. At first, there are 228 more oranges in Box A than in Box B. Mrs Ho then transfers 600 oranges from Box A to Box B. Now, Box B contained 5 times as many oranges as Box A. How many oranges are there in each box at first?

Answer: Box A: \_\_\_\_\_ [3]

Box B: \_\_\_\_\_ [2]

**End-of-Paper**





# Answer Ke

## EXAM PAPER 2011

SCHOOL : ACS

SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

- 16) 8.09      17) 1.1kg      18) 0.06      19)  $4\frac{4}{5}$       20) 35 yr 10 mth
- 21) 1:6      22) 264      23) 96      24)  $110^\circ$       25)  $127^\circ$
- 26)  $55^\circ$       27) 9cm      28) 12 pens      29) \$7.10      30) 2 sweets

### Paper 2

1)  $12 \times 5 = 60\text{cm}$

It is 60cm

2) spoon  $\rightarrow$  \$3.40

Fork  $\rightarrow$  \$6.20

$6.2 + 3.4 = 9.6$

$489.6 \div 9.6 = 51$

She bought 51 forks

3)  $\frac{3}{4} = \frac{9}{12}$

$\frac{7}{12} = \frac{9}{12} = \frac{16}{12}$

$624 \div 16 \times 12 = 468$

It is 468

4)  $4 \div 10 \times 12 = 4.8$

$1188 \div 48 = 247.5$

$247.5 \times 10 = \$2475$

His salary is \$2475

5) D  $\rightarrow$  1u

M  $\rightarrow$  2.5u

E  $\rightarrow$  2.5u - 21

$327 + 21 = 348$

$348 \div 6 = 58$

$(58 \times 2.5) - 21 = \$124$

She has \$124

6)  $19.80 \div 18 = 10$

$1.10 \times 8 = 8.80$

$19.80 - 8.80 = 11$

$11 \div 5 = 2.20$

$55 \div 2.20 = 25$

He can buy 25 bottles of coke

7) o  $\rightarrow$  1u

a  $\rightarrow$  2u

$1u - 40 + 190 = 2u + 70$

$1u + 150 = 2u + 70$

$150 - 70 = 80$

$80 \div 1 = 80$

$80 \times 2 = 160$

He had 160 apples at first

8)  $2.2m + 1.5u = 3.6m + 1u$

$1.5u - 1u = 0.5u$

$3.6 - 2.2 = 1.4$

$0.5u \rightarrow 1.4$

$1u \rightarrow 2.8$

$1.5 \times 2.8 = 4.2$

$4.2 + 2.2 = 6.4$

$2.8 + 3.6 = 6.4m$

It is 6.4m

9)  $9/10 \times 1650 = 1485$   
 $107/100 \times 1485 = \$1588.95$   
The amount of money is \$1588.95

10) J : M      J  $\rightarrow$  5u  
     5 : 2      M  $\rightarrow$  2u

$5u - 25 = 2u + 25 + 55$   
 $5u - 25 = 2u + 80$   
 $80 + 25 = 105$   
 $105/3 = 35$   
 $35 \times 5 = 175$   
It was \$175

11)  $2/3 \times 52 \times 25 \times 48 = 41600$   
 $41600 - 2720 = 38880$   
 $38880/4320 = 9$   
It takes 9 minutes

12) a)  $185 - 30 = 155$   
      $155 - 30 = 125$   
     He had 125 stamps at first  
     b)  $3/5 \times 125 = 75$   
      $75 + 30 + 155 = 260$   
     They had 260 twenty-six cent stamps

13) a)  $48 + 35 = 83$   
      $166 \div 83 = 2$   
      $48 \times 2 = 96$   
     It is 96 marks  
     b)  $48 + 40 + 35 = 123$   
      $123 \times 2 = 246$   
      $246 \div 3 = 82$   
     It is 82 marks

14) C  $\rightarrow$  12u      B  $\rightarrow$  12u  
     Left C  $\rightarrow$  10u  
     B  $\rightarrow$  10u - 1728  
      $(10u - 1728) \times 4 = 40u - 6912$   
      $40u - 6912 = 12u - 864$   
      $6912 - 864 = 6048$   
      $6048/28 = 216$   
      $216 \times 12 = 2592$   
     There were 2592 chocolate muffins

15)E→48

M→13

C→39

$$897/39 \times 100 = 2300$$

$$13/100 \times 2300 = 299$$

a) There were 2300 books

b) There were 299 Malay books

16)  $\angle EDC = 60^\circ$

$$\angle BCE = 90^\circ$$

$$\angle BCD = 60^\circ + 90^\circ = 150^\circ$$

$\angle CBD$  or  $\angle BDC$

$$= (180^\circ - 150^\circ) \div 2 = 15^\circ$$

$$\angle DBE = 45^\circ - 15^\circ = 30^\circ$$

$$\angle x = 180^\circ - 45^\circ - 30^\circ = 105^\circ$$

It is  $105^\circ$

17)  $492 - 326 = 166$

$$166 \times 2 = 332$$

$$R + S = 332$$

$$166 - 74/2 = 46$$

$$46 + 74 = 120$$

After 50% taken away

$$S \rightarrow 120$$

$$R \rightarrow 46$$

$$46 \times 2 = 92$$

He had 92 bookmarks

18) Before

After

$$A \rightarrow u$$

$$A \rightarrow u - 600$$

$$B \rightarrow u - 228$$

$$B \rightarrow (u - 228) + 600 = u + 372$$

$$5u - 3000 = u + 372$$

$$372 + 3000 = 3372$$

$$3372 \div 4 = 843$$

$$843 - 228 = 615$$

There were 843 oranges in Box A and 615 oranges in Box B