Anglo-Chinese School
(Junior)

SEMESTRAL ASSESSMENT 2 (2010)
PRIMARY 5

MATHEMATICS

PAPER 1
Booklet A

Thursday 28 October 2010 50 min

INSTRUCTIONS TO PUPILS

DO NOT TURN OVER THE PAGES UNTIL YOU ARE TOLD TO DO SO.

Follow all instructions carefully.

There are 15 questions in this booklet.

Answer ALL questions.

You are **not** allowed to use a calculator.

Name : _____ ( )

Class : 5.( )

Parent's Signature:_____

This question paper consists of 6 printed pages. (Inclusive of cover page)

ACS(J) P5 Math SA2 2010

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) and shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.
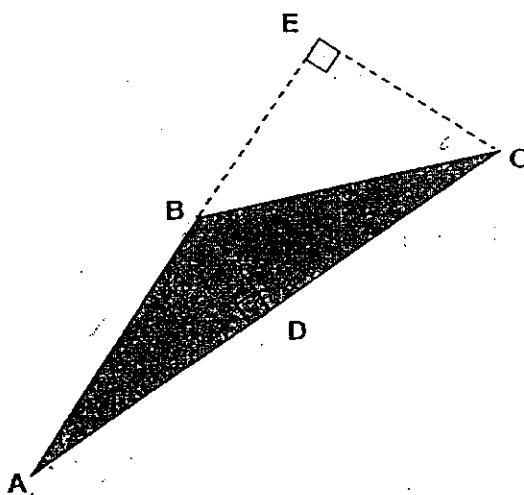
1   364 751 , 364 851 , 364 951 , _____ .
    What is the missing number in the number pattern?

    (1)   364 051
    (2)   364 961
    (3)   365 051
    (4)   365 151

2   Which of the following, when rounded off to the nearest hundred, is 15 000?

    (1)   15 450
    (2)   15 101
    (3)   14 959
    (4)   14 899

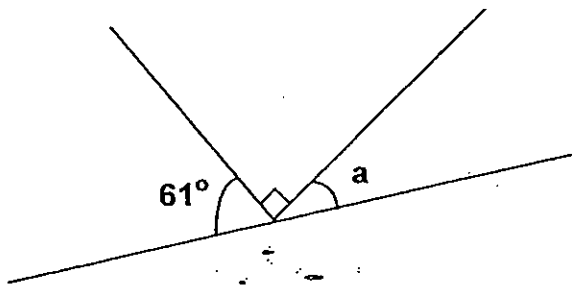3   In the figure below, if EC is the height of Triangle ABC, what is the base of the triangle?

    (1)   AB
    (2)   AC
    (3)   BC
    (4)   BD

4   If 12 : X : Y = 72 : 48 : 36, what numbers do X and Y represent?

	X	Y
(1)	3	4
(2)	4	3
(3)	6	8
(4)	8	6

5   The figure is not drawn to scale. Find the value of $\angle$a.

(1)   29°
(2)   39°
(3)   119°
(4)   139°

6   Express 18 days as a fraction of 6 weeks.

(1) $\dfrac{1}{7}$
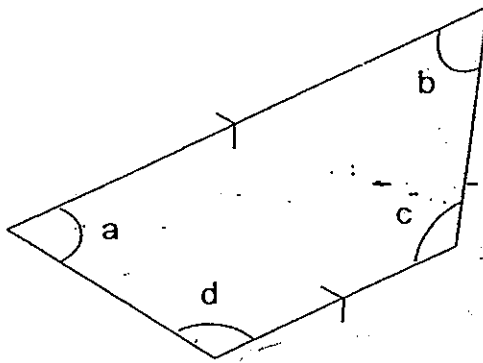
(2) $\dfrac{1}{3}$

(3) $\dfrac{3}{7}$

(4)   3

7   2 km 50 m is the same as _____ m.

   (1)   250
   (2)   2005
   (3)   2050
   (4)   2500

8   If 71.4 ÷ 3 = 23.8, what is the missing number in 71.4 ÷ _____ = 0.238?
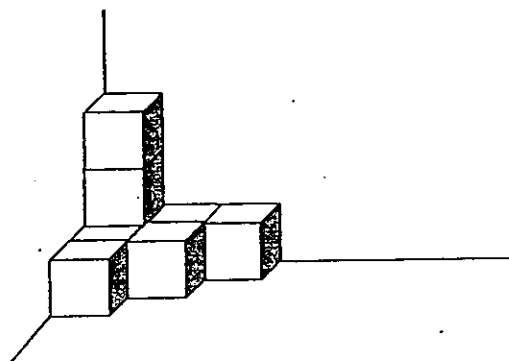
   (1)   3
   (2)   30
   (3)   300
   (4)   3000

9   The figure below is a trapezium. Which of the following statements is correct?

   (1) $\angle a = \angle b$

   (2) $\angle b = \angle d$

   (3) $\angle b + \angle c = 180°$

   (4) $\angle c + \angle d = 180°$

10   The figure shows a solid which is formed by using 2-cm cubes. What is the volume of the solid?

    (1)   16 cm³
    (2)   32 cm³
    (3)   56 cm³
    (4)   64 cm³

11   Find the value of $20 - 20 \div 10 \times 2 + 24 \div 2$.

    (1)   12
    (2)   20
    (3)   28
    (4)   31

12   Add 56.3 and 0.72. The digit in the hundredths place is _____.

    (1)   0
    (2)   2
    (3)   5
    (4)   6

13   Jasmine bought a roll of ribbon measuring 105 cm. She used $\frac{2}{5}$ of it on a gift box. How much ribbon had she left?

    (1)   42 cm
    (2)   45 cm
    (3)   63 cm
    (4)   65 cm

14   In the figure (not drawn to scale), what is the sum of $\angle$ u, $\angle$ w, $\angle$ x and $\angle$ y?
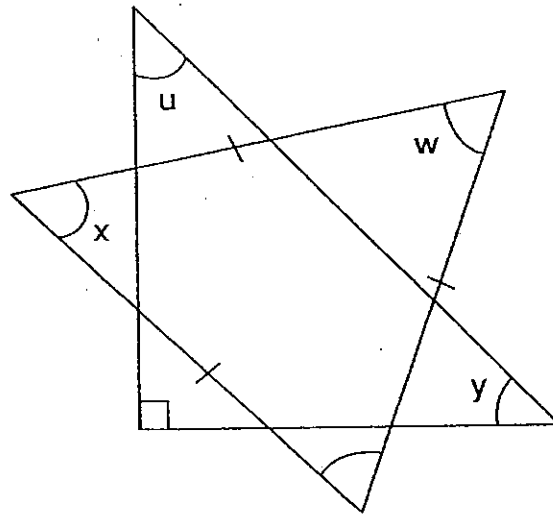
(1)   165°
(2)   210°
(3)   225°
(4)   270°

15   In a school, 60% of the pupils are girls. 10% of the girls and 25% of the boys go to school by car. What percentage of the pupils go to school by car?

(1)   16%
(2)   25%
(3)   35%
(4)   95%

Anglo-Chinese School
(Junior)

SEMESTRAL ASSESSMENT 2 (2010)
PRIMARY 5

MATHEMATICS

PAPER 1
Booklet B

Thursday   28 October 2010   50 min

INSTRUCTIONS TO PUPILS

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There are 15 questions in this booklet.

Answer ALL questions.

You are **not** allowed to use a calculator.

Name : _____ (   )

Class : 5.(   )

Booklet	Possible Marks	Marks Obtained
A	20	
B	20	
TOTAL	40	

Parent's Signature:_____

This question paper consists of 6 printed pages. (Inclusive of cover page)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which requires units, give your answers in the units stated. (10 marks)
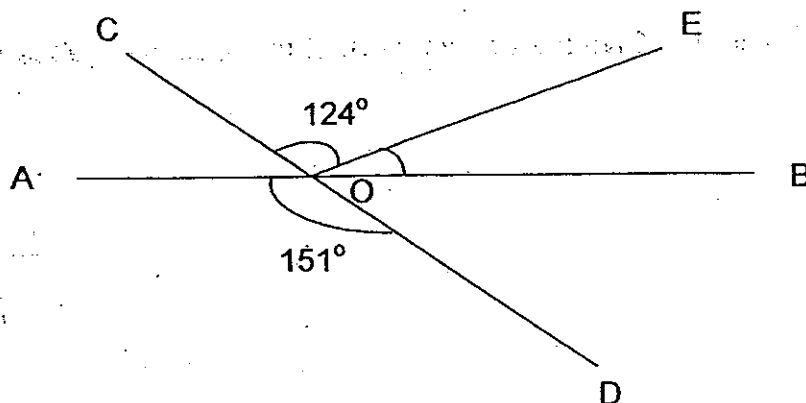
16   Write two million, two thousand and two in figures.

17   Express 29 minutes as a percentage of 2 hours.
      (Give the answer correct to 2 decimal places.)

%

18   How many **more** squares must be shaded so that the ratio of the number of unshaded squares to the number of shaded squares is 1 : 3.
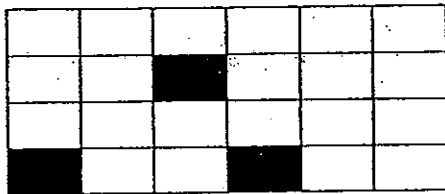
19   AOB and COD are straight lines. Find ∠BOE.

C   E

124°

A ——————————— B
              O

151°

D

o

Sub Total

20 Ryan has a string measuring 2.3 m. Ian's string is 28 cm shorter than Ryan's string. Find the length of Ian's string.

$$\boxed{\qquad\qquad\qquad\text{m}}$$
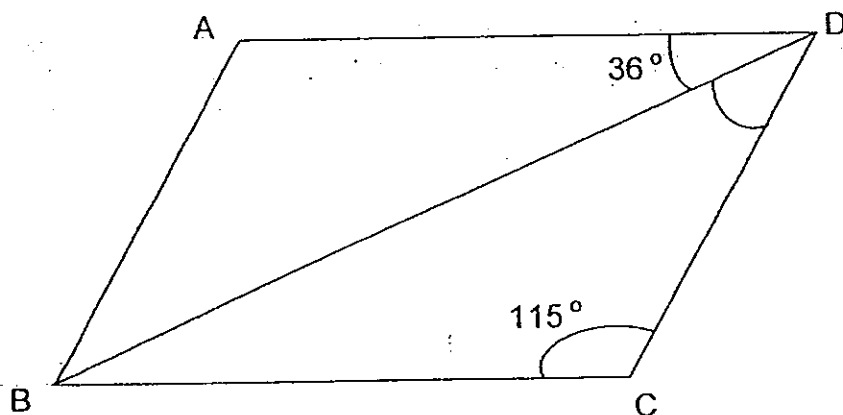
21 $\dfrac{4}{7} + \dfrac{\square}{21} + \dfrac{1}{3} = 1\dfrac{1}{7}$, what is the missing numerator in the box?

$$\boxed{\qquad\qquad\qquad}$$

22 $\dfrac{1}{3}$ of the flowers in the garden were roses. $\dfrac{4}{5}$ of the roses were red. What fraction of the flowers were red roses?

$$\boxed{\qquad\qquad\qquad}$$

23 Express $3\dfrac{6}{7}$ as a decimal. (Give the answer correct to 2 decimal places.)

$$\boxed{\qquad\qquad\qquad}$$

Sub Total

24   ABCD is a parallelogram. ∠BCD = 115° and ∠ADB = 36°. Find ∠BDC.
      (The figure is not drawn to scale.)


```
                                              o
```

25   A rectangular tank, measuring 7 cm by 9 cm by 20 cm, is completely filled with
      water. After some water was poured out, the depth of the water decreased to
   15 cm. How much water was poured out?
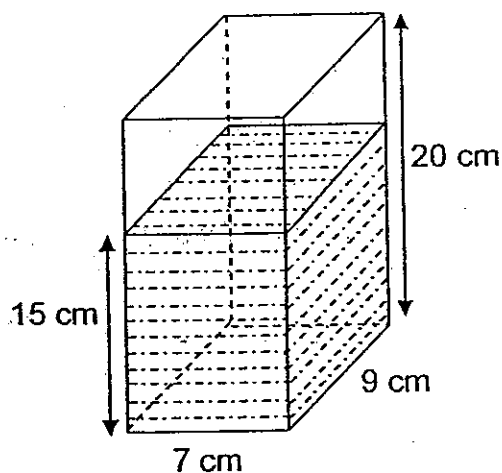

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                                            cm³
```

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

26   A box can hold 82 tennis balls. The same box can hold 46 more balls if it is filled with ping pong balls instead. How many ping pong balls can 25 such boxes hold?

27   Robert bought a pizza. He ate $\frac{2}{5}$ of it and shared the rest equally among his two friends and himself. What fraction of the whole pizza did each friend get?

28   A wooden block measures 32 cm by 27 cm by 12 cm. Find the greatest number of 3-cm cubes that can be cut from it. ·

12 cm

27 cm

32 cm
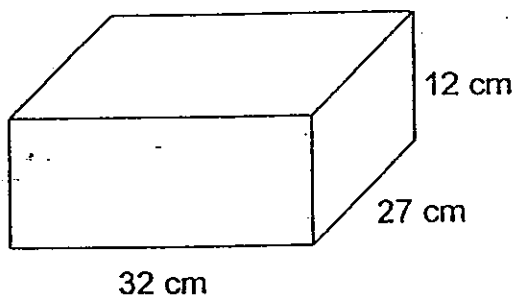
29 ABCD is a square and ECB is an equilateral triangle. Find ∠p.
    (The figure is not drawn to scale.)

A   B

p   E

D   C

```
                                    o
```
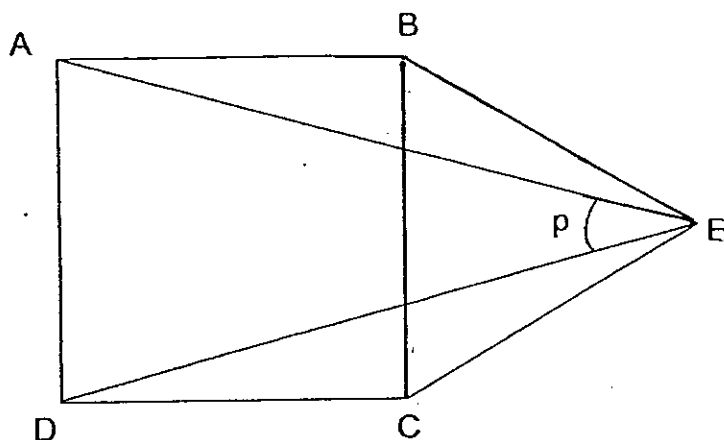
30. The average mass of 2 boys is 46.2kg. The average mass of 4 girls is 40.8kg.
     What is the average mass of the 6 children?

```
                            kg
```

Sub Total

Anglo-Chinese School
(Junior)

SEMESTRAL ASSESSMENT 2 (2010)
PRIMARY 5

MATHEMATICS

PAPER 2

Thursday   28 October 2010   1 hr 40 min

INSTRUCTIONS TO PUPILS

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Name : _____ (   )

Class : 5.(   )

Parent's Signature: _____

Paper	Possible Marks	Marks Obtained
1	40	
2	60	
TOTAL	100	

This question paper consists of 15 printed pages. (Inclusive of cover page)

ACSJ P5 MATH SA2 2010

1   The ratio of the number of Alan's stickers to the number of Benjamin's stickers was 4 : 3. Alan gave Benjamin 9 of his stickers and they each had the same number of stickers. How many stickers did Benjamin have at first?

2   Find the area of the shaded part.

10cm

5cm

10cm   5cm
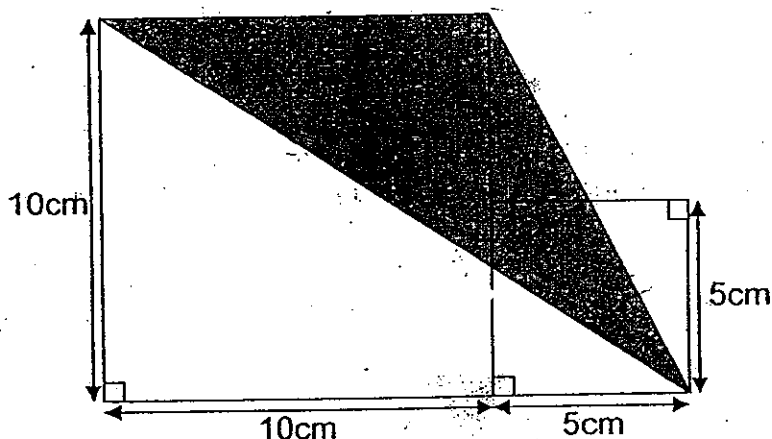
cm²

3   Julian bought a packet of sweets. He gave $\frac{1}{7}$ of them to his cousin and $\frac{1}{2}$ of the remaining sweets to his brother. Then he found that he had 51 sweets left for himself. How many sweets did he have at first?

4   Draw a parallelogram PQRS in which PQ = 5cm, ∠SPQ = 100° and
     PS = 4cm. The line PQ has been drawn for you.

P _____   Q

5   The diagram below shows 4 figures formed by shaded and unshaded
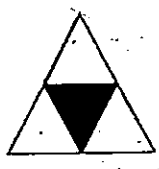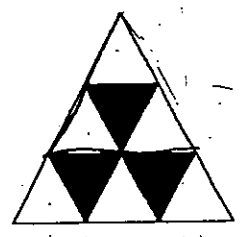   triangles. What is the total number of triangles in Figure 17?

Figure 1   Figure 2   Figure 3   Figure 4   ····· Figure 17
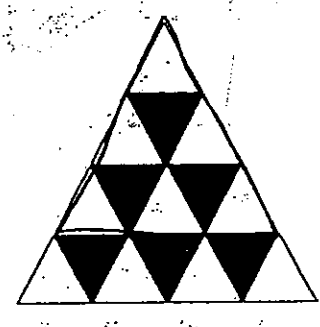
?

For questions **6** to **18**, show your workings clearly in the space provided for each question and write your answers in the spaces provided.
The number of marks awarded is shown in brackets [ ] at the end of each question or part-question. (50 marks)

6   Michael is 12 years old and his brother is 5 years old. In how many years' time will their total age be 41 years?

Ans: _____ [3]

7   Amos had 4 times as many stamps as Michelle. The average number of stamps owned by both of them is 540. How many more stamps did Amos have than Michelle?

Ans: _____ [3]

8   The ratio of the area of Rectangle A to that of Rectangle B to that of Rectangle C is 5 : 4 : 3. $\frac{3}{10}$ of Rectangle A and $\frac{1}{6}$ of Rectangle C are shaded. The shaded area is 36 cm^2 Find the total unshaded area of the figure.
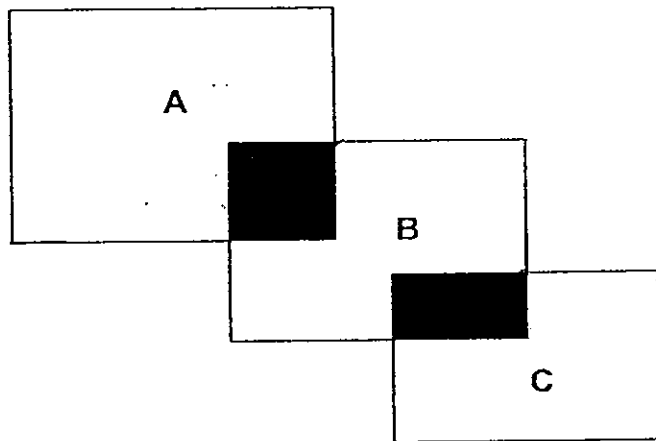
Ans: _____ [3]

Sub-total:

9   Mr Lee wanted to buy 7 calculators but found that he was short of $36.40. If he were to buy 4 calculators, he would have $15.20 left over. How much did Mr Lee have?

Ans: _____ [3]

Sub-total:

10 Jasper and Ken earned $5430 altogether. $\frac{1}{5}$ of Jasper's monthly salary was $85 more than $\frac{1}{6}$ of Ken's monthly salary. How much money did Jasper earn each month?

Ans: _____ [3]

11. Charles bought a box of apples. $\frac{1}{4}$ of the apples are green and the rest are red. $\frac{5}{12}$ of the red apples and $\frac{3}{8}$ of the green apples are rotten. There are 42 good red apples. How many green apples are not rotten?

Ans: _____ [4]

12   Aaron and Devi went shopping with a total of $300 and each bought some items. The amount Aaron spent is three times the amount he has left. The amount Devi spent is twice the amount she has left. Given that the two friends have a total of $90 left, how much did each of them have at first?

Ans: _____ [2]

_____ [2]

13   Ahmad spent $12.80 more than Ryan, and four times as much money as Vincent. The 3 boys spent $118.60 altogether. How much money did Vincent spend?

Ans_____ [4]

14. A set of sofa cost $3200. During a sale, Mrs Wee bought it at a discount of 15%. She had to pay an additional 7% GST on the sale price.

(a) How much was the GST?
(b) How much did she pay altogether?

Ans: (a) _____ [2]

(b) _____ [2]

Sub-total:

15   2 similar mugs and 6 similar plates cost $144. Each plate costs $8 more than a mug. What is the cost of 1 mug and 1 plate?

Ans: _____[4]

16. A rectangular tank 60 cm long, 45 cm wide and 30 cm high was $\frac{3}{5}$ full of water. Water began to leak from a crack at the base of the tank at 400 cm³ per minute. At the same time, water was also added into the tank from a tap at 2.2 ℓ per minute. How long did it take to fill the tank completely with water?

60 cm

30 cm

45 cm

crack
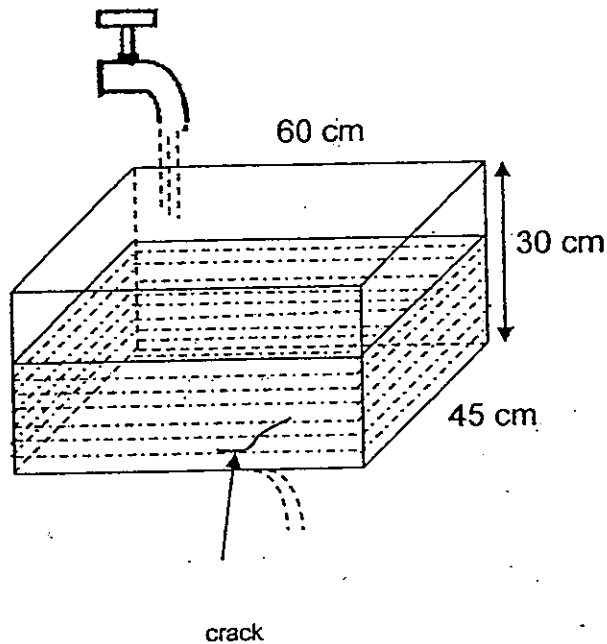
Ans: _____ [5]

17 The number of apples at a store was 80% more than the number of oranges. After 60% of the oranges were sold, there were 42 more apples than oranges. Find the total number of apples and oranges at the store at first.

Ans: _____ [5]

18. Mr Gan withdrew $\frac{1}{6}$ of his savings from the bank to buy a plasma television set and a DVD player in April. The plasma television set cost $2400 while the DVD player cost $\frac{2}{5}$ as much.

(a) How much money had he left in the bank?

(b) In the following month, Mr Gan deposited $\frac{1}{4}$ of his monthly salary into the bank and his savings increased to $18 200. What was Mr Gan's monthly salary?

Ans: (a) _____ [3]

(b) _____ [2]

THE END

EXAM PAPER 2010

SCHOOL : ANGLO-CHINESE PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

16) 2002002   17) 24.17   18) 5   19) 27   20) 2.02

21) 5   22) 4/15   23) 3.86   24) 29   25) 315

26) 3200   27) 1/5   28) 360   29) 36   30) 42.6

Paper 2

1) 54   2) 50   3) 119

4)

5) 289

6) $12 - 5 = 7$
    $41 - 7 = 34$
    $34 \div 2 = 17$
    $17 - 5 = \underline{12}$
	7) total stamps $= 540 \times 2$
	                    $= 1080$
	    1 unit $\rightarrow 1080 \div 5$
	                    $= 216$
	    3 units $\rightarrow \underline{648}$

8) 4 units $\rightarrow 36cm^2$
    1 unit $\rightarrow 9cm^2$
    $10 + 8 + 6 = 24$ units
    $24 - (3 \times 2) - (1 \times 2) = 24 - 6 - 2$
                                $= 16$
    16 units $\rightarrow 9 \times 16$
                    $= \underline{144\ cm^2}$
	9) 3 units $\rightarrow \$36.40 + \$15.20$
	                    $= \$51.60$
	    1 unit $\rightarrow \$51.60 \div 3$
	                    $= \$17.20$
	    Total $\rightarrow \$(17.20 \times 4) + \$15.20$
	                    $= \underline{\$84}$

10) 11 units $\rightarrow \$5430 - \$(85 \times 5)$
                    $= \$5005$
    1 unit $\rightarrow \$455$
    5 units $\rightarrow \$2275$
    $\$2275 + \$(85 \times 5) = \underline{\$2700}$
	11) $42 \div 7 = 6$
	    $6 \times 12 = 72$
	    $72 \div 3 = 24$
	    $24 - 9 = \underline{15}$

12) Aaron: $\underline{\$120}$
    Devi : $\underline{\$180}$
	13) $\$118.60 + \$12.80 = \$131.40$
	    9 units $\rightarrow \$131.40$
	    1 unit $\rightarrow \underline{\$14.60}$

14) $6 \times \$8 = \$48$
    $\$144 - \$48 = \$96$
    1 mug $\rightarrow \$96 \div 8$
                $= \$12$
    1 mug + 1 plate $\rightarrow \$12 \times 2 + \$8$
                    $= \underline{\$32}$
	15) water in tank per min $\rightarrow 2200 - 400$
	                                $= 1800$
	    vol. empty spc. $\rightarrow 2/5 \times 60 \times 30 \times 45$
	                                $= 32400$
	    Time taken $\rightarrow 32400 \div 1800$
	                    $= \underline{18\ mins}$

17) $180\% - 40\% = 140\% \rightarrow 42$
    $10\% \rightarrow 3$
    Total fruits $= 3 \times 28$
                    $= \underline{84}$
	18a) cost of DVD $\rightarrow 2/5 \times \$2400$
	                    $= \$960$
	    1/6 saving $\rightarrow \$960 + \$2400$
	                    $= \$3360$
	    Money left $\rightarrow \$3360 \times 5$
	                    $= \underline{\$16800}$
	18b) $\$18200 - \$16800 = \$1400$
	    Monthly salary $= \$1400 \times 4$
	                    $= \underline{\$5600}$