# RAFFLES GIRLS' PRIMARY SCHOOL

## SEMESTRAL ASSESSMENT ( 2 )
### 2004

| | | Class | Level |
|---|---|---|---|
| Your Score Out of **100** marks | | | |
| Highest score | | | |
| Average score | | | |
| Parent's Signature | | | |

Name : _____ Class: P5____ Index No: _____

**2 Nov 2004    MATHEMATICS    ATT: 2 h 15 min**

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<u>Booklet A (25 marks)</u>

Questions 1 to 5 carry 1 mark each. Questions 6 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 correct oval on the Optical Answer Sheet.
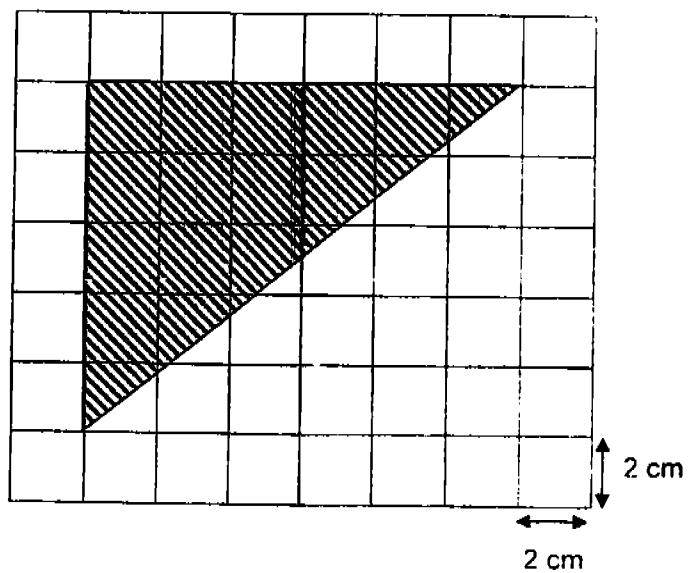
1. The digit 6 in 2.365 is in the _____ place.

   (1)   ones
   (2)   tenths
   (3)   hundredths
   (4)   thousandths

2. Express $4\frac{3}{7}$ as an improper fraction.

   (1)   $\frac{43}{7}$

   (2)   $\frac{31}{7}$

   (3)   $\frac{28}{7}$

   (4)   $\frac{25}{7}$

1
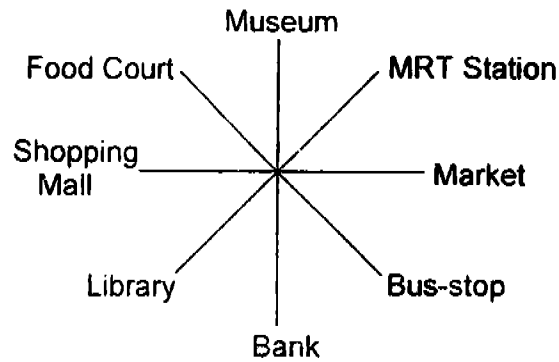
3.  What is the area of the shaded triangle in the grid ?



2 cm

2 cm

(1)    14 cm²

(2)    15 cm²

(3)    56 cm²

(4)    60 cm²

4.  Lifang had $200. She used 50% of it to buy a watch and 15% of it to buy a book. How much did the two items cost?

(1)    $15

(2)    $30

(3)    $115

(4)    $130

5. Study the figure below carefully.



Esther is facing the Shopping Mall. If she turns 135° clockwise, where will she be facing then?

(1)   Bus-stop
(2)   MRT Station
(3)   Library
(4)   Food Court

6. Which one of the following is the same as 3kg 15g ?

(1)   30.15  kg
(2)   3.15  kg
(3)   3.105 kg
(4)   3.015 kg

7. Which one of the following fractions is less than $\dfrac{5}{24}$ ?

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

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

(3)   $\dfrac{1}{4}$

(4)   $\dfrac{1}{8}$

3

8. The table below shows the parking rates at Kovan Carpark.

| Parking Rates | |
|---|---|
| First hour | $ 2.00 |
| Every additional hour or part thereof | $ 1.00 |

David wants to park his car in the carpark from 11.00 a.m. to 2.30 p.m. on Monday. How much does he have to pay?

(1)    $ 5.50
(2)    $ 5
(3)    $ 4.50
(4)    $ 4

9. This table shows the number of people who visited ABC bookstore from April to July.

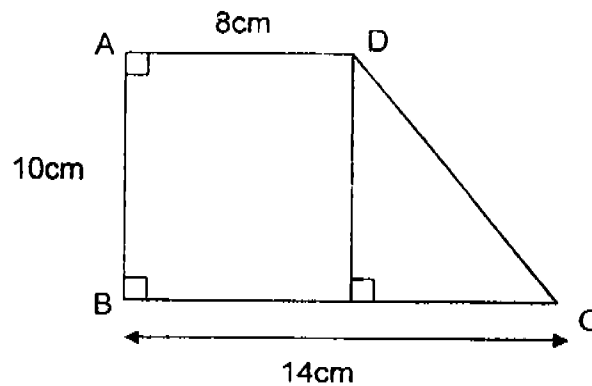| Month | Number of people |
|---|---|
| April | 60 |
| May | 20 |
| June | ? |
| July | 40 |

An average of 34 people visited the bookstore over the four months. How many people visited the store in June?

(1)    16
(2)    18
(3)    34
(4)    136

10. Use the digits 7, 2, 0 and 8 to form the smallest 4-digit number. Which digit is in the tens place?

    (1)    0

    (2)    2

    (3)    7

    (4)    8

11. The area of the figure below (not drawn to scale) is _____.



    (1)    78 cm$^2$

    (2)    110 cm$^2$
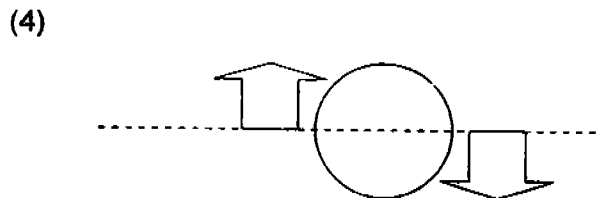
    (3)    124 cm$^2$
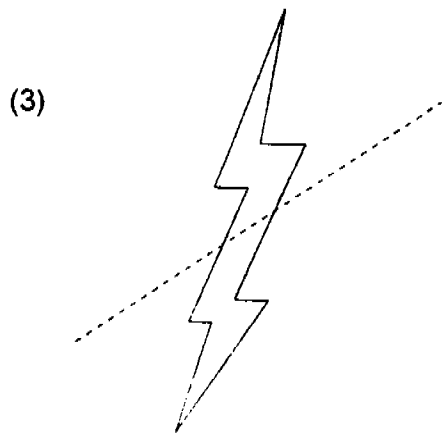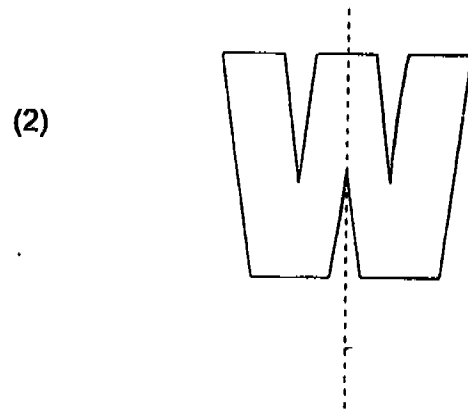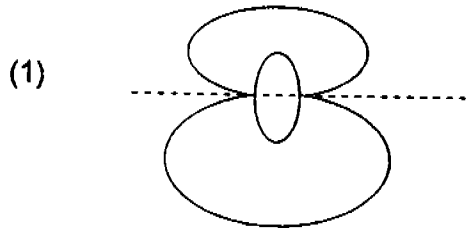
    (4)    156 cm$^2$

12. The volume of a cube is 27 cm$^3$.
    What is the total length of all its sides?

    (1)    24 cm

    (2)    30 cm

    (3)    36 cm

    (4)    48 cm

5

13. The perimeter of a rectangle is 40 cm. The ratio of its breadth to its length is 1 : 3. Find the length of the rectangle.

    (1)    5 cm
    (2)    10 cm
    (3)    15 cm
    (4)    30 cm

14. In which of the following figures does the dotted line represent a line of symmetry?

(1)

(2)

(3)

(4)

15. Find the difference between the seventh multiple of 6 and the sum of all the factors of 9.

    (1)    29
    (2)    26
    (3)    18
    (4)    13

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Questions 16 to 35 carry 1 mark each.

Write your answers in the spaces provided.

Give your answers in the units stated.

16.    Take away 0.099 from 2.

Ans : _____

17.    Express $1\frac{5}{8}$ as a decimal correct to 2 decimal places.
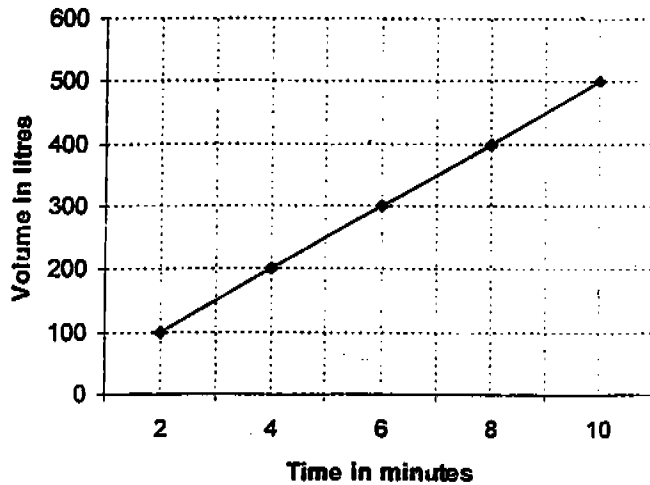
Ans : _____

18.    Subtract $3\frac{4}{9}$ from 5. Give your answer in its simplest form.

Ans: _____

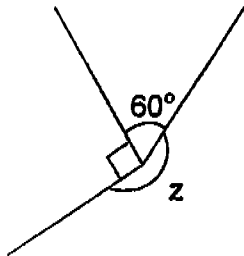19.    Simplify $\frac{4}{5} \div 10$.

Ans: _____

7

20. The graph below shows the amount of water flowing into a tank from a big tap.



How long does it take 400 litres of water to flow into the tank?

Ans: _____ min

21. The figure below is not drawn to scale. Find ∠ z.



Ans: _____

22. Three bottles of jam cost $8. Dolly bought 15 such bottles of jam. How much did she spend altogether?

Ans: $ _____

23. The ratio of the three sides of a triangle is 3 : 2 : 4. If the length of the longest side is 12 m, find the shortest side of the triangle.

Ans: _____m

24. The average price of 4 packets of coffee powder is $8. Three of them cost $24.50. What is the cost of the fourth packet of coffee powder?

Ans : $_____

25. Simplify   7 + 3 × 6 ÷ (10 - 8)

Ans: _____

26. 500 people attended a concert. 445 of them were children and the rest were adults. What percentage of the audience were adults?

Ans: _____%

9

27. Cheryl bought 4.3 m of cloth. She used 187cm of it to make a pillow case. How many metres of cloth had she left?

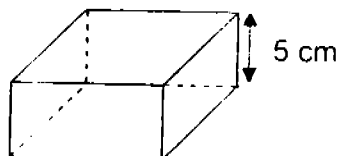Ans : _____ m

28. $2.08 = 2 +$ ❓

What is the missing fraction in the box? Express your answer in its lowest term.

Ans: _____

29. Find the capacity of a tank measuring 40 cm by 20 cm by 5 cm. Express your answer in litres.
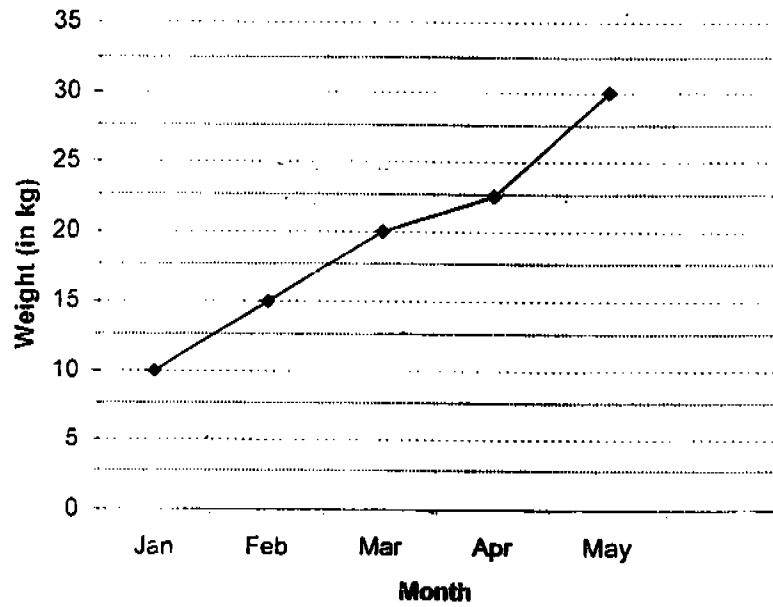
Ans : _____ $l$

30. $320 \ cm^3$ of metal was melted down to make the box shown here. What is the length of each side of the square base of the box?



5 cm

Ans : _____ cm

31. Polly recorded the weight of her dog at the end of each month from January to May. She then plotted the readings as shown in the line graph below.



How much weight did the dog gain from April to May?

Ans: _____ kg

32. Using a set square and ruler, draw a line that is perpendicular to PQ from R.

• R

P _____ Q

11

33. Patricia sat for 3 tests last month. Her scores for the tests are given in the table below. Find her average score for the tests.

| Test | Score (out of 50 marks) |
|------|-------------------------|
| English | 10 |
| Mathematics | 30 |
| Science | 44 |

Ans: _____marks

34. Using the given unit shape below, draw 3 more similar shapes to form a tessellation.
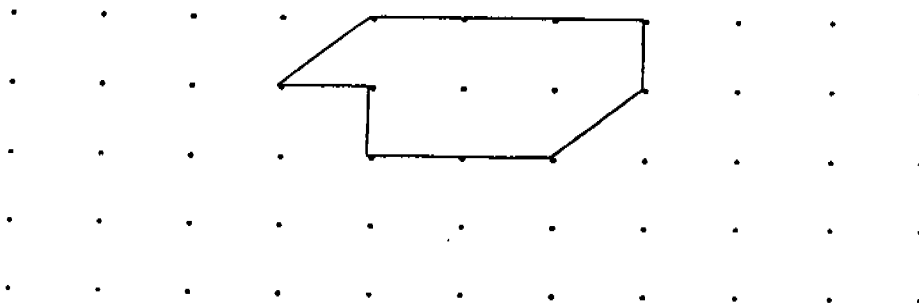


35. 2210 pupils went on a field trip. A teacher was assigned to every group of 25 pupils. What was the least number of teachers required for the outing?

Ans: _____ teachers

**Booklet B2 (55 marks)**

For questions 36 to 50, show your working clearly in the space below each question and write your answers in the spaces provided.

The number of marks available is shown in the brackets [ ] at the end of each question or part question.

36. Jolin had to multiply 2.85 by 3. She added the two numbers instead.

What was the difference between her answer and the actual answer?

Ans : _____ [2]

37. Charmaine has the same number of ten-cent coins as she has fifty-cent coins. If their total value is $15, how many coins does Charmaine have altogether?

Ans: _____ [2]

13

38. Alice had some stamps. She gave $\frac{5}{9}$ of the stamps to her cousin. The remaining stamps were shared equally between her two brothers with each receiving 16 stamps. How many stamps had Alice at first?

Ans; _____ [3]

39. The figure below is made up of an isosceles triangle and an equilateral triangle. Find ∠x.
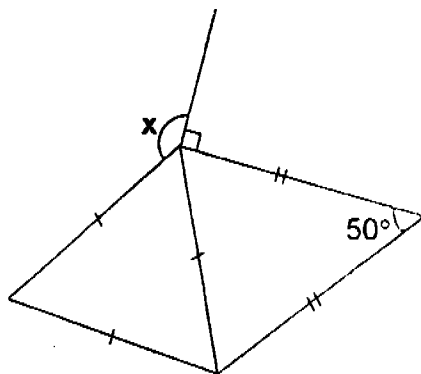


Ans: _____ . [3]

40. Sam paid $64 for 5 similar files and 3 similar textbooks. A textbook cost $8 more than a file. What was the cost of one textbook?

Ans: _____ _____[3]

41.- There were 4 more boys than girls in a class of 40 children. Miss Loy collected a total sum of $ 176 from the boys for a class party. What would be the average amount of money contributed by each boy?

Ans : _____[3]

15

42. A pair of sports shoes cost $150. During a sale, it was sold at $120.

(a) How much cheaper would the shoes be during the sale?

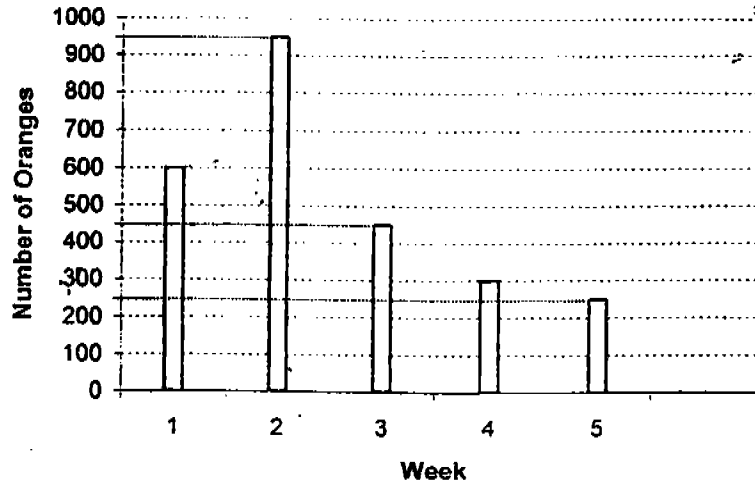(b) What was the percentage discount given to consumers during the sale?

Ans : (a)_____[1]

(b)_____[2]

43. Min Min wanted to buy a tennis racket. She had only $\frac{1}{4}$ of the money. After her mother had given her $60, she was still short of $\frac{1}{3}$ of the money. What was the cost of the tennis racket?

Ans :_____[4]

44.   The graph below shows the sale of oranges at a supermarket over a period
of 5 weeks.



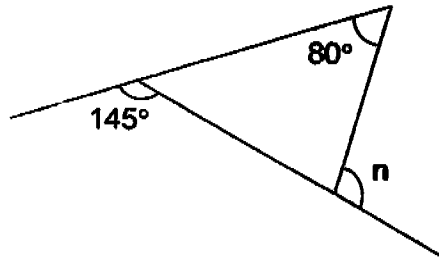(a)   What fraction of the oranges sold in the 5 weeks were sold in Week 1?
(Give your answer in its simplest form.)

(b)   If all the oranges were sold at 6 for $2 in Week 3, what was the total
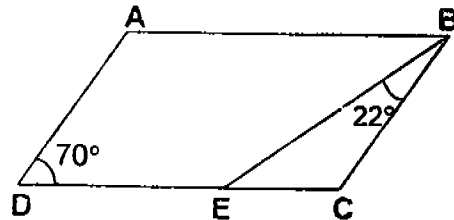amount collected for that week?

Ans:(a)_____[2]

(b)_____[2]

17

45. (a) The figure below is formed by 3 straight lines. Find ∠n.



Ans: _____[2]

(b) In the figure below, ABCD is a parallelogram. Find ∠DEB.



Ans: _____[2]

18

46. Yoko saved only 20-cent coins in her piggy bank. She put in one 20-cent coin on the first day and three 20-cent coins on the second day. Each day Yoko put in 2 coins more than what she had put in the day before.



Day 1    Day 2    Day 3    ●●●●
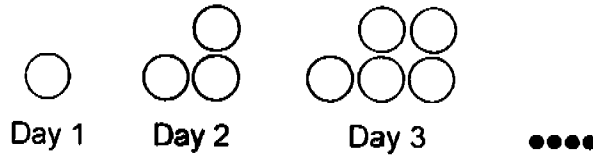
(a) How many coins did Yoko put in on the 5th day?

(b) What was the total number of coins she had put in for 9 days?

(c) How much money did she save in two weeks?

| Day | Number of coins saved each day | Total number of coins saved |
|-----|-------------------------------|----------------------------|
| 1 | 1 | 1 |
| 2 | 3 | 4 |
| 3 | 5 | 9 |
| 4 | ● | ● |
| 5 | (a) | ● |
| ⁝ | ⁝ | ⁝ |
| 9 | ● | (b) |

Ans: (a)_____[1]

(b)_____[1]

(c)_____[2]

19

47. Flask A contained five times as much water as Flask B. When Devi poured 3.2 litres of water from Flask A to Flask B, the water in Flask A became twice the amount of water in Flask B.

(a) How many litres of water are there in the two flasks altogether?

(b) Devi mixed all the water from both the flasks with 2.8 litres of rose syrup. She then poured the mixture into 2-litre bottles filling them up to the brim. How many full bottles would she have?

Ans: (a) _____[3]

(b)_____[2]

48.  A container with a rectangular base of 50 cm by 12 cm is half-filled with water.

If the volume of water in the container is 9 $\ell$.

(a) find the height of the container .

(b) what will be the water-level when 10 big marbles each of volume 180 cm$^3$

are put into the container?

Ans : (a) _____[3]

(b) _____[2]

49. At Mary's birthday party, the ratio of the number of female guests to the number of male guests at first was 5 : 6. Later in the evening, 8 female guests left the party. The ratio of the number of female guests to the number of male guests became 1 : 2.

(a) How many male guests were there at the party?

(b) If Mary had spent $12 on the food for each guest, how much had she spent on the food for all her guests?

Ans: (a)_____[3]

(b)_____[2]

22

50. Dawn and May had some stickers. If Dawn were to give 25% of her 72 stickers to May, May's number of stickers would increase by 9%.

(a) How many stickers would May have in the end?

(b) If Dawn and May were to share the stickers out equally between them, how many stickers would each of them receive?

Ans: (a) _____ [3]

(b) _____ [2]

### End of Paper

(Please remember to check your working carefully.)

Setters: Ms Tan Cheo Tee
       Ms Lim Koon Lan
       Mdm Lim See Peng

23

SA2

### Booklet A (25 marks)
Questions 1 to 5 carry 1 mark each.
Questions 6 to 15 carry 2 marks each.

| 1. | | 3 | 4. | | 4 | 7. | | 4 | 10. | | 3 | 13. | | 3 |
|----|---|---|----|---|---|----|---|---|-----|---|---|-----|---|---|
| 2. | | 2 | 5. | | 2 | 8. | | 2 | 11. | | 2 | 14. | | 2 |
| 3. | | 4 | 6. | | 4 | 9. | | 1 | 12. | | 3 | 15. | | 1 |

### Booklet B (20 marks)
Questions 16 to 35 carry 1 mark each.

| 16. | 1.901 | 20. | 8 | 24. | 7.50 | 28. | $\frac{2}{25}$ | 32. | -- |
|-----|-------|-----|-----|-----|------|-----|------|-----|-----|
| 17. | 1.63 | 21. | 210 | 25. | 16 | 29. | 4 | 33. | 28 |
| 18. | 1⅝ | 22. | 40 | 26. | 11 | 30. | 8 | 34. | -- |
| 19. | $\frac{2}{25}$ or 0.08 | 23. | 6 | 27. | 2.43 | 31. | 7.5 or 7½ | 35. | 89 |

### Booklet B (55 marks)

36.  2.85 x 3 = 8.55
     2.85 + 3 = 5.85
     8.55 − 5.85 = **2.7**  M1 A1

37.  10÷50 = 60
     1500÷60=25  M1
     total→25x2
        =**50 coins**  A1

38.



     cousin          16
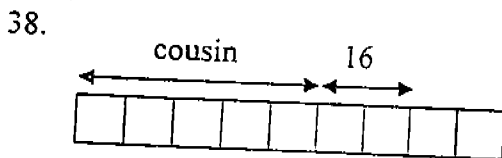
     2 units ----16      M1
     1 unit ----16 ÷ 2 = 8
     9 units -----9 x 8      M1
        = **72 stamps**  A1

39.  (180°−50°)÷2=65° M1
     60°+90°+65°=215°
     ∠x →360°−215°  M1
        =**145°**      A1

40.  8x3=$24
     64−24=$40  M1
     1 file→40÷8=5
     1 storybk→8−5  M1
        = **$13** A1

41.  40 − 4 = 36
     Boys − (36 ÷ 2) ÷ 4 = 22  M1
     Av. Sum − 176 ÷ 22   M1
        = **$8**     A1

42.  a) $150−$120 = **$30**      A1
     b) $\frac{30}{150}$ x 100% = **20%**     M1 A1
     OR
     b) $150----100%
        $15----- 10%
        $30----10% x 2  M1
        = **20%**     A1

**43.** <u>Method 1</u>

$$\frac{1}{4} \qquad \$60 \qquad \frac{1}{3}$$
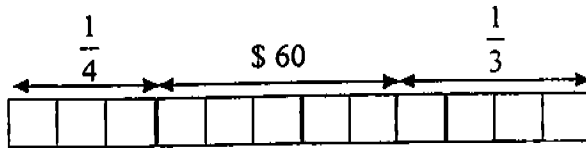
Correct Model----M1
5 units ------$60
1 unit -------$60 \div 5 = \$12$     M1
12 units ----$12 \times 12 = \underline{\$144}$    M1 A1

<u>Method 2</u>

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

$$\frac{2}{3} - \frac{1}{4} = \frac{5}{12} \qquad \text{M1}$$

$$\frac{5}{12} ---- \$60 \qquad \text{M1}$$

$$\text{Cost} ---- \frac{60}{5} \times 12 = \underline{\$144} \qquad \text{M1 A1}$$

**44a)**   Total sold ---$600 + 950 + 450 + 300 + 250$
            $= 2550$

$$\text{Week 1} ---- \frac{600}{2550} = \frac{4}{17} \qquad \text{M1 A1}$$

**b)**   $450 \div 6 = 75$
    Amt. collected--- $75 \times \$2$    M1
               $= \underline{\$150}$     A1

**45a)**   $180° - 145° = 35°$
     $\angle n \rightarrow 35° + 80° = \underline{115°}$   M1 A1

   **OR**   $145° - 80° = 65°$
        $\angle n \rightarrow 180° - 65° = \underline{115°}$   M1 A1

**b)**   $\angle ABE \rightarrow 70° - 22° = 48°$
     $\angle DEB \rightarrow 180° - 48° = \underline{132°}$   M1 A1

   **OR**   $\angle DCB \rightarrow 180° - 70° = 110°$
        $\angle DEB \rightarrow 22° + 110° = \underline{132°}$   M1 A1

**46.**   a) $5 \times 2 - 1 = \underline{9}$    A1
     b) $9 \times 9 = \underline{81}$    A1
     c) $14 \times 14 = 196$
        amt. saved $\rightarrow 196 \times 0.20 = \underline{\$39.20}$   M1 A1

**47.**

   A
   B    3.2 ℓ
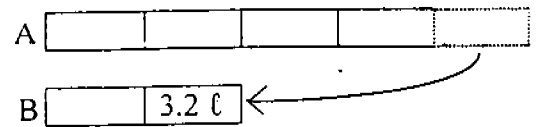
Correct Model----M1
1 unit --- 3.2 ℓ
a)   6 units --- $3.2 \times 6 = \underline{19.2 \text{ ℓ}}$    M1 A1

     Mixture --- $19.2 + 2.8 = 22$ ℓ
b)   No. of bottles--- $22 \div 2 = \underline{11}$   M1 A1

**48.**   Base area --- $50 \times 12 = 600$
      $9$ ℓ $= 9000$ cm$^3$
      ½ full --- $9000 \div 600$   M1
               $= 15$ cm
   a) Ht of cont.--- $15 \times 2$    M1
              $= \underline{30 \text{ cm}}$    A1

     10 marbles --- $180 \times 10 = 1800$
     Water + marbles --- $9000 + 1800 = 10800$
   b) Water level --- $10800 \div 600$   M1
              $= \underline{18 \text{ cm}}$     A1

              F : M
**49.**   At first $\rightarrow$ 5 : 6
     Later $\rightarrow$ 1 : 2
            = 3 : 6
     2 units $\rightarrow$ 8    M1
     1 unit $\rightarrow$ 4
   a) 6 units $\rightarrow 6 \times 4 = \underline{24}$    M1 A1

     Total no. $\rightarrow 11 \times 4 = 44$
   b) Spent $\rightarrow 44 \times 12 = \underline{\$528}$   M1 A1

**50.**   No. given --- 25% of $72 = 18$
       9% ----- 18
       1% ----- $18 \div 9 = 2$
     May at first --- $2 \times 100 = 200$   M1
   a) Now --- $200 + 18 = \underline{218 \text{ stickers}}$   M1 A1

     Total --- $200 + 72 = 272$
   b) Each --- $272 \div 2 = \underline{136 \text{ stickers}}$   M1 A1

   **OR**   Total--- $218 + 72 - 18 = 272$
        Each--- $272 \div 2 = \underline{136 \text{ stickers}}$