2016 SEMESTRAL EXAMINATION 2
MATHEMATICS
PRIMARY 5

PAPER 1
(BOOKLET A)

Name: _____ ( ) Parent's Signature

Class: Primary 5_____ _____

Marks:

Paper 1	Booklet A	20
	Booklet B	20
Paper 2		60
Total		100

Total Time for Booklets A and B: 50 min

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.
You are **not** allowed to use a calculator.

Booklet A:
Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each of the questions, four options are given. One of them is the correct answer. Choose the correct answer (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet provided.

(20 marks)

1. Singapore attracted 231 469 tourists from a particular country last year. Express this number to the nearest thousand.

   (1) 200 000
   (2) 230 000
   (3) 231 000
   (4) 232 000

2. How many tens make 780 000?

   (1) 78
   (2) 780
   (3) 7 800
   (4) 78 000

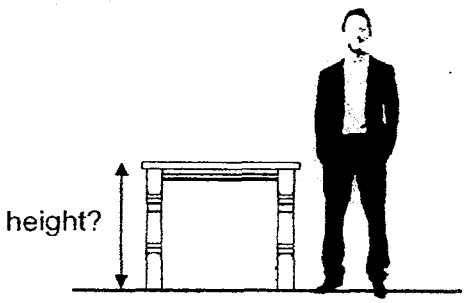
3. What is the sum of 12 ℓ 50 mℓ and 1 ℓ 8 mℓ?

   (1) 13.058 ℓ
   (2) 13.130 ℓ
   (3) 13.300 ℓ
   (4) 13.580 ℓ

(Go on to the next page)

4. The figure below shows a man standing next to a table.
Which of the following could be the height of the table?

(1) 8 cm
(2) 80 cm
(3) 800 cm
(4) 8000 cm



5. Which of the following has the same value as $\frac{2}{5} \div 3$?

(1) $\frac{2}{5} \times \frac{1}{3}$

(2) $\frac{2}{5} \times \frac{3}{1}$

(3) $\frac{5}{2} \times \frac{1}{3}$

(4) $\frac{5}{2} \times \frac{3}{1}$

6. $66 - 30 \div 3 - 8 - 2 =$?
What is the missing number in the box?

(1) 6
(2) 2
(3) 46
(4) 50

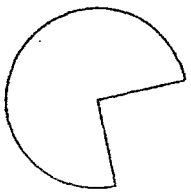
(Go on to the next page)

7. What is the value of 3 hundreds + 4 tens + 17 tenths?

(1) 350.7
(2) 341.7
(3) 340.17
(4) 304.17

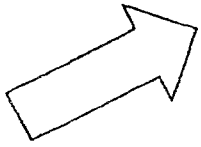
8. Which one of the following shapes has more than one line of symmetry?

(1)

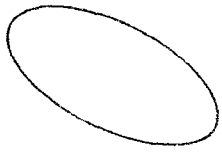


(2)

(3)



(4)



9. The ratio of the length of a rectangle to its breadth is 5 : 3.
The perimeter of the rectangle is 32 cm.
What is the length of the rectangle?

(1) 6 cm
(2) 10 cm
(3) 12 cm
(4) 20 cm

(Go on to the next page)

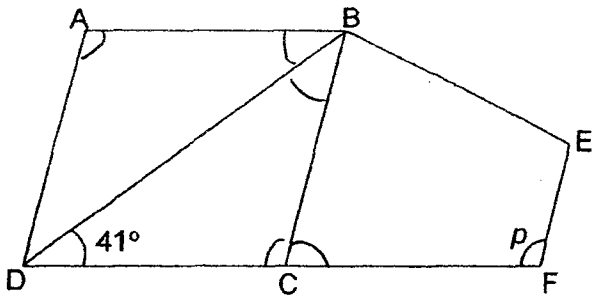
10. Express 0.7 as a percentage.

(1) 0.7%
(2) 7%
(3) 70%
(4) 700%

11. Express $2\frac{3}{25}$ as a decimal.

(1) 2.12
(2) 2.15
(3) 2.3
(4) 2.6

12. The figure below is made up of a rhombus ABCD and a trapezium BEFC. DCF is a straight line and $\angle BDC = 41°$ Find $\angle p$.



(1) 82°
(2) 98°
(3) 108°
(4) 139°

(Go on to the next page)

13. $15 : 12 = 40 : \boxed{?}$

What is the missing number in the box?

(1) 37
(2) 32
(3) 8
(4) 4

14. What is the maximum number of 3-cm cubes that Matthias can cut from a styrofoam cuboid that measures 18 cm by 12 cm by 10 cm?

(1) 13
(2) 72
(3) 80
(4) 240

15. After spending $\frac{3}{7}$ of her money on a handbag, Mrs Ng had \$384 left.

How much money did she have at first?

(1) \$288
(2) \$512
(3) \$672
(4) \$896

(Go on to Booklet B)

2016 SEMESTRAL EXAMINATION 2
MATHEMATICS
PRIMARY 5

PAPER 1
(BOOKLET B)

Name: _____( )

Class: Primary 5_____

/20

Total Time for Booklets A and B: 50 min

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

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

Booklet B:
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.

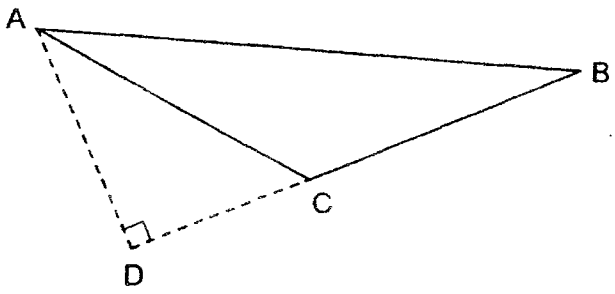
(10 marks)

16. Divide 14 040 by 20.

Do not write in this space

Ans: _____

17. In the figure below, given that AD is the height of the triangle ABC, what is its base?



Ans: _____

18. Express 11 m 2 cm in metres. Give your answer as a decimal.

Ans: _____ m

(Go on to the next page)

19. Find the value of 4.037 x 300

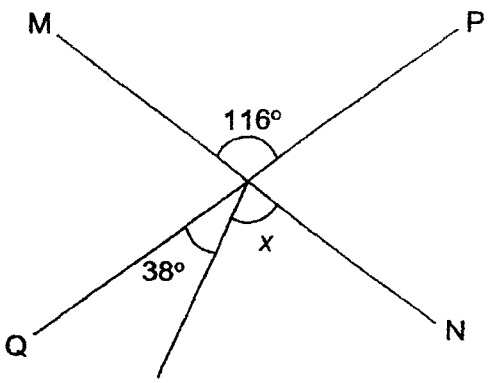
Do not write in this space

Ans: _____

20. Divide 1365 by 9. Round off your answer to 2 decimal places.

Ans: _____

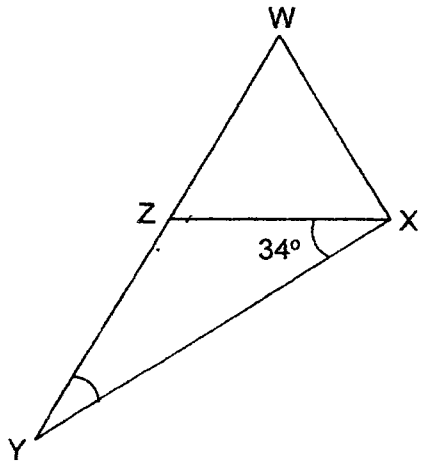
21. In the figure below, MN and PQ are straight lines. Find $\angle x$.



Ans: _____ °

(Go on to the next page)

22. In the figure below, WXZ is an equilateral triangle and WZY is a straight line. $\angle YXZ = 34°$. Find $\angle WYX$.



Ans: _____ °

23. Jane has 4 different pieces of string measuring 20 cm, 18 cm, 10 cm and 12 cm. What is the average length of each piece of string?

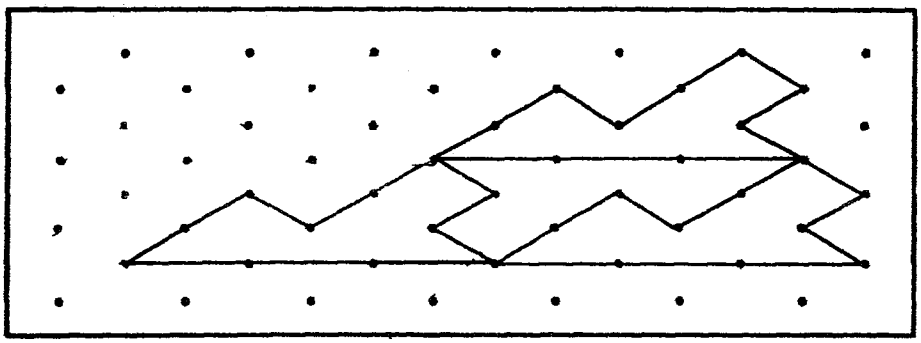
Ans: _____ cm

Do not write in this space

(Go on to the next page)

24. The pattern in the box shows part of a tessellation. Extend the tessellation by drawing **two** more unit shapes in the space provided in the box.

Do not write in this space



25. The ratio of the mass of Box A to the mass of Box B is 1 : 3. The ratio of the mass of Box B to the mass of Box C is 9 : 5. Express the ratio of the mass of Box A to the mass of Box B to the mass of Box C.

Ans: _____

(Go on to the next page)

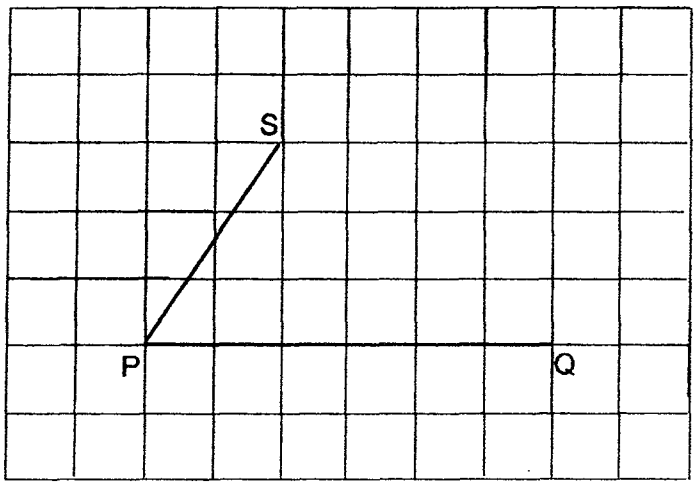
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

26. PS and PQ form two sides of a trapezium PQRS. $\angle PQR = 90°$.

a) Complete the drawing of trapezium PQRS.

b) Measure and write down the size of $\angle SPQ$.



$\angle SPQ =$ _____ °

27. May and Sue spent a total of \$345. Sue and Ted spent a total of \$505. Ted spent thrice as much as May. How much money did May spend?

Ans: \$_____

Do not write in this space

(Go on to the next page)

28. 40% of the pupils in the hall are girls. There are 1047 boys. How many pupils are there altogether?

Do not write in this space

Ans: _____

29. Bryan had $\frac{4}{7}$ as much money as Candy at first. When Candy gave $45 to Bryan, they had the same amount of money. How much money did Bryan have at first?

Ans: $ _____

30. Charmaine mixed 0.55 ℓ of sugar syrup with 1.85 ℓ of water. The mixture is then poured into bottles of 700 mℓ each. How much mixture is left over? Express your answer in millilitres.

Ans: _____ mℓ

End of Paper

2016 SEMESTRAL EXAMINATION 2
MATHEMATICS
PRIMARY 5

PAPER 2

Name: _____ ( )

Class: Primary 5_____

60

Time for Paper 2: 1 h 40 min

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

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 space provided. For questions which require units, give your answers in the units stated.

(10 marks)

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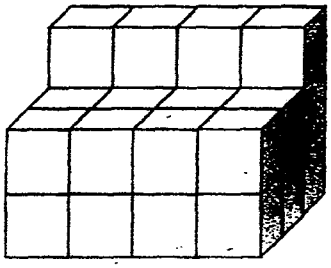
1. The figure below is made up of cubes of sides 1 cm. How many **more** 1-cm cubes are needed to form a large cube of side 4 cm?



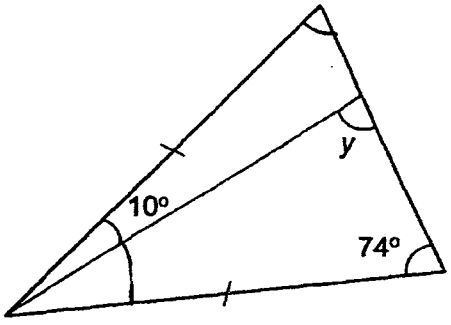
Ans: _____

Do not write in this space

2. Mary bought 3 packets of walnuts at $1.85 per packet and a packet of berries at $3.65. She gave the cashier a $50 note. How much change should she receive?

Ans: $_____

3. In the figure below, find $\angle y$.



Ans: _____ °

(Go on to the next page)

4. Mrs Tee paid a total of $216 for 3 identical belts and 3 identical dresses. Each dress cost 8 times as much as a belt. Find the difference in price between a dress and a belt.

Ans: $_____

5. Last year, 81 pupils participated in a Science quiz where there were gold, silver or bronze awards to be won. $\frac{2}{3}$ of the pupils won either a gold or silver award. 12 of them won bronze awards. How many pupils **did not** win any of the awards?

Ans: _____

(Go on to the next page)

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)

6.

TRICK-YOUR-EYES MUSEUM

Tickets are priced at:
$25 each (adult)
$20 each (child)
For every 2 adults and 3 children tickets bought, a $10 discount will be given.

Ms Wong and 3 parent volunteers took a class of 30 children to the Trick-Your-Eyes Museum. What was the minimum cost of all the tickets to be bought?

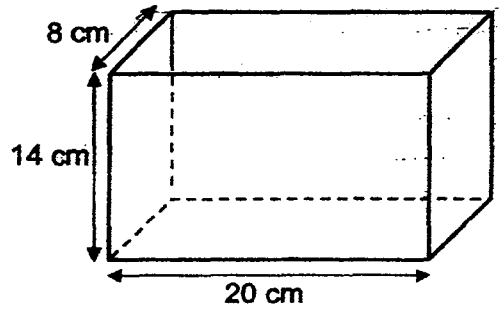
Ans: _____ [4]

Do not write in this space

(Go on to the next page)

7. Charlotte poured 5 cups of water into an empty rectangular tank as shown below. The volume of water in each cup was 25 cm^3. How much more water was needed to fill the tank to the brim?

Do not write in this space



Ans: _____ [3]

8. There were 120 apples and 120 oranges in a basket at first.
$\frac{3}{5}$ of the apples and $\frac{2}{3}$ of the oranges were used in a party.
(a) How many apples were used in the party?
(b) How many more oranges than apples were used in the party?

Ans: (a) _____ [2]

(b) _____ [2]

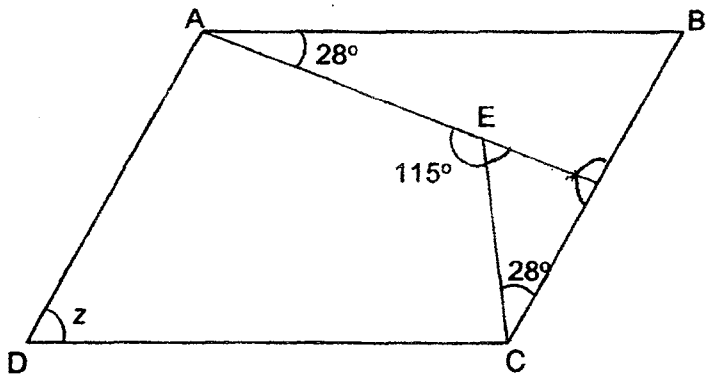
(Go on to the next page)

9. Sally bought some sweets and chocolates. Each sweet cost \$0.20 and each chocolate cost \$0.50. She bought a total of 22 sweets and chocolates for \$5.60. How many sweets did she buy?

Do not write in this space

Ans: _____ [3]

10. In the figure below, ABCD is a parallelogram. Find $\angle z$.



Ans: _____ [4]

11. Mr Ho gave a sum of money to his son and 5 daughters in the ratio 4 : 11. His son received $1800. Each of his daughters received an equal amount of money.
Find the difference between the sum of money received by his son and each of his daughters.

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

12. Richard and Sean had 60 sweets each. Richard gave 20% of his sweets to Sean. After receiving the sweets from Richard, Sean gave 50% of his total sweets to Tim. How many sweets had Sean left?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

13. Mr Tan wanted to place pots of flowers at equal distance apart from each other along the perimeter of his square garden.
He placed a flower pot at each corner and an equal number of flower pots along each side of the square garden. He had 79 pots of flowers to use.

a) What was the maximum number of flower pots Mr Tan could use to place along the perimeter of the square garden?

b) How many flower pots would there be along each side of the square garden including the flower pots at the 2 corners?

Do not write in this space

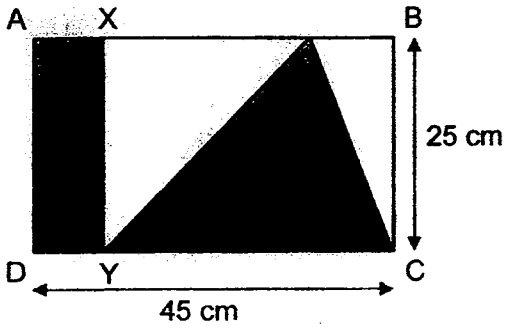
Ans: a)_____ [2]

b)_____ [3]

(Go on to the next page)

14. The area of rectangle AXYD is $\frac{1}{5}$ of the area of the rectangle ABCD.

Find the area of the shaded parts.



Do not write in this space

Ans: _____ [3]

(Go on to the next page)

15. In a theatre, $\frac{4}{9}$ of the audience were adults. $\frac{1}{4}$ of the adults were women. There were 160 fewer men than children in the theatre.

a) What fraction of the audience were men?
Give your answer in its simplest form.

b) What was the total number of women and children in the theatre?

Do not write in this space

Ans: a) _____ [2]

b) _____ [3]

(Go on to the next page)

16. Chadrick was training for a swimming competition.
On Day 1 of his training, he swam 600 m.
On Day 2, he swam 0.1 km more than Day 1.
For each subsequent training session, he swam a distance of 0.1 km more than the previous training session.

a) On Day 5 of his training session, how far did he swim?
Give your answer in metres.

b) On which day did he swim a distance of 3 km?

Do not write in this space

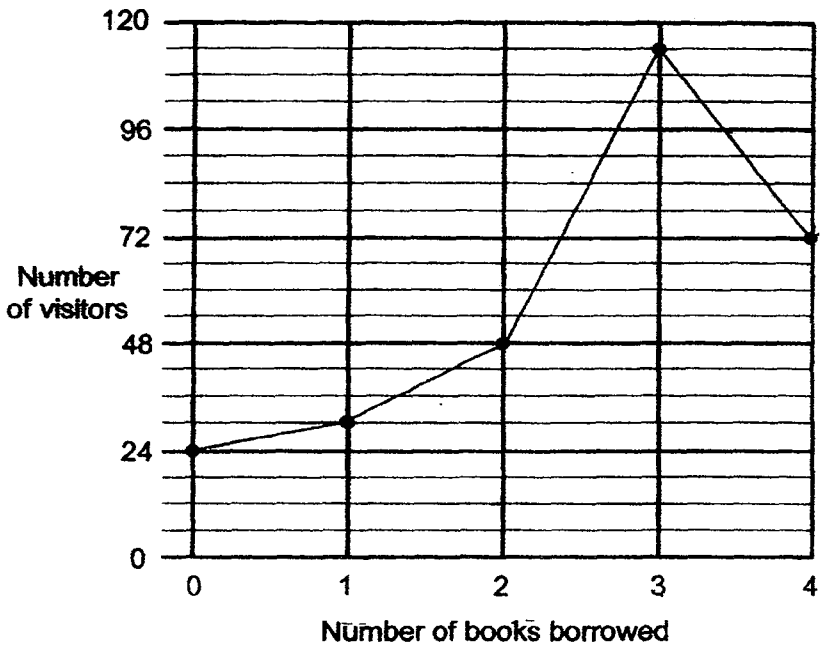
Ans: (a)_____ [2]

(b) Day _____ [3]

(Go on to the next page)

17. The graph below shows the number of books borrowed by visitors at a Community Library on a Sunday.

Do not write in this space



a) How many visitors visited the Community Library that Sunday?

b) What was the average number of books borrowed by each visitor that Sunday? Give your answer to the nearest whole number.

Ans: a)_____ [1]

b)_____ [3]

(Go on to the next page)

18. Mr Soh paid a total of $4500 for a cabinet and a refrigerator after a discount of 40%. The ratio of the original price of the cabinet to the original price of the refrigerator was 1 : 2.
Find the original price of the refrigerator before the discount.

Do not write in this space

Ans: _____ [4]

-END OF PAPER-

Setters: Mrs Josephine Lai, Ms Yew Hew Mei, Ms Grace Chan, Mr Yip Yew Fei

ANSWER KEY

YEAR : 2016
LEVEL : PRIMARY 5
SCHOOL : HENRY PARK PRIMARY
SUBJECT : MATHEMATICS
TERM : SA2

Paper 1

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

Q16 702

Q17 BC

Q18 11.02 m

Q19 1211.1

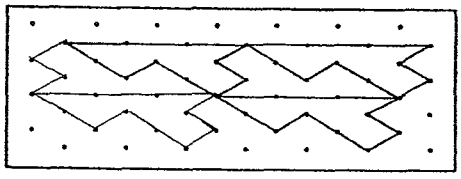
Q20 151.67

Q21 $116° - 38° \Rightarrow \underline{78°}$

Q22 $180 \div 3 = 60$
$60 + 34 = 94$
$94 + 60 = 54$
$180 - 154 \Rightarrow \underline{26°}$

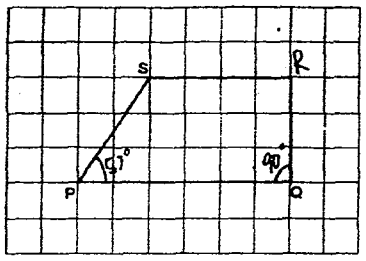
Q23 $20 + 18 + 10 + 12 = 60$
$60 \div 4 \Rightarrow \underline{15\text{ cm}}$

Q24



Q25 3 : 9 : 5

Q26a



Q26b ∠SPQ = <u>57°</u>

Q27 505 – 345 → 160
160 ÷ 2 ⇒ <u>$80</u>

Q28 60 % → 1047
1 % → 1047 ÷ 60 = 17.45
100 % → 17.45 x 100 ⇒ <u>1745 pupils</u>

Q29 45 ÷ 3 → 15
15 x 8 ⇒ <u>$120</u>

Q30 0.55 + 1.85 → 2.40
2400 ÷ 700 = 3R30 ⇒ <u>300 mℓ</u>

<u>Paper 2</u>

Q1 4 x 4 x 4 → 64
64 – 28 ⇒ <u>36</u>

Q2 1.85 x 3 → 5.55
50 – 5.55 – 3.65 ⇒ <u>$40.80</u>

Q3 180° - 10° - 74° → 96°
180° - 96° ⇒ <u>84°</u>

Q4 216 ÷ 3 = 72
72 ÷ 9 = 8
8 x 7 ⇒ <u>$56</u>

Q5 81 ÷ 3 → 27
27 – 12 ⇒ <u>15 pupils</u>

Q6 $30 - 6 = 24$
$24 \times 20 = 480$
$25 \times 4 = 100$
$20 \times 6 = 120$
$100 + 120 = 220$
$220 - 20 = 200$
$200 + 480 \Rightarrow \underline{\$680}$

Q7 $20 \times 14 \times 8 = 2240$
$5 \times 25 = 125$
$2240 - 125 \Rightarrow \underline{2115\ cm^3}$

Q8a $120 \div 15 \rightarrow 8$
$8 \times 9 \Rightarrow \underline{72\ apples}$

Q8b $8 \times 10 \rightarrow 80$
$80 - 72 \Rightarrow \underline{8\ oranges}$

Q9 $0.20 \times 22 = 4.4$
$5.60 - 4.4 = 1.2$
$1.2 \div 0.3 = 4$
$22 - 4 \Rightarrow \underline{18\ sweets}$

Q10 $180° - 115° = 65°$
$180° - 28° - 65° = 87°$
$180° - 87° = 93°$
$180° - 28° - 93° \Rightarrow \underline{59°}$

Q11 $1800 \div 4 = 450$
$450 \times 11 = 4950$
$4950 \div 5 = 990$
$1800 - 990 \Rightarrow \underline{\$810}$

Q12 $12 \div 2 = 6$
$60 \div 10 = 6$
$6 \times 6 \Rightarrow \underline{36\ sweets}$

Q13a $79 \div 4 \rightarrow 19.75$
$19 \times 4 \Rightarrow \underline{76\ flower\ pots}$

Q13b $76 - 4 = 72$
$72 \div 4 = 18$
$18 + 2 \Rightarrow \underline{20\ flower\ pots}$

Q14 $45 \times 25 = 1125$
$1125 \div 5 = 225$
$225 \div 25 = 9$
$45 - 9 = 36$
$\frac{1}{2} \times 36 \times 25 = 450$
$450 + 225 \Rightarrow \underline{675\ cm^2}$

Q15a $\frac{3}{9} \div 3 \Rightarrow \frac{1}{3}$

Q15b $5u - 3u = 2u$
$2u = 160$
$1u = 160 \div 2 = 80$
$80 \times 5 = 400$
$400 + 80 \Rightarrow \underline{480}$

Q16a 0.1 km = 100 m

Day 2 → 600 + 100 = 700
Day 3 → 700 + 100 = 800
Day 4 → 800 + 100 = 900
Day 5 → 900 + 100 ⇒ <u>1000 m</u>

Q16b 3 km = 3000 m

Day 6 → 1000 + 100 = 1100
↓ ↓ ↓
<u>Day 25</u> → 2900 + 100 = 3000 m

Q17a $114 + 72 + 48 + 30 + 24 \Rightarrow \underline{288\ visitors}$

Q17b $(30 \times 1) + (48 \times 2) + (114 \times 3) + (72 \times 4) = 756$
$756 \div 288 = 2.625 \approx \underline{3\ books}$

Q18 $4500 \div 60 = 75$
$75 \times 100 = 7500$
$7500 \div 3 = 2500$
$2500 \times 2 \Rightarrow \underline{\$5000}$

End