



NANYANG PRIMARY SCHOOL

**TERM 1 WEIGHTED ASSESSMENT
2020**

PRIMARY 6

**MATHEMATICS
PAPER 1
(BOOKLET A)**

Total Duration for Booklets A and B: 1 hour

Additional materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.
5. The use of calculators is **NOT** allowed.

Name: _____ . ()

Class: Primary 6 ()

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 your answer on the Optical Answer
Sheet.
(20 marks)

- 1 Simplify the following algebraic expression.

$$34 + 9a - a + 5a$$

- (1) $3a + 34$
- (2) $6a + 43$
- (3) $13a + 34$
- (4) $15a - 34$

- 2 What is the value of 58×1000 ?

- (1) 580 000
- (2) 58 000
- (3) 5800
- (4) 580

- 3 Joseph used $\frac{2}{3}$ ℓ of water and $\frac{1}{10}$ ℓ of syrup to make a drink. He spilled $\frac{1}{3}$ ℓ of the drink. How much drink did he have left?

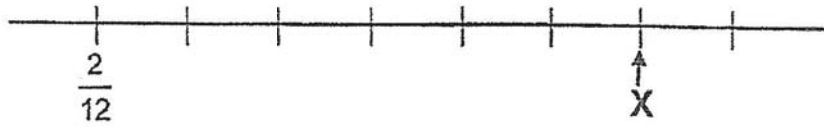
(1) $1\frac{3}{30}$ ℓ

(2) $\frac{27}{30}$ ℓ

(3) $\frac{13}{30}$ ℓ

(4) $\frac{7}{30}$ ℓ

- 4 In the number line below, what is the value of X as indicated by the arrow?



(1) $\frac{7}{12}$

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

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

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

5 Which one of the following expressions will give a value of $\frac{3}{8}$?

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

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

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

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

- 6 Ding Wei packed $\frac{5}{8}$ kg of sweets equally into 10 bags. What was the mass of the sweets in each bag?

(1) $\frac{5}{80}$ kg

(2) $\frac{8}{50}$ kg

(3) $\frac{50}{8}$ kg

(4) $\frac{80}{5}$ kg

- 7 Which of the following is the same as 312 cm?

(1) 0.312 m

(2) 3.12 m

(3) 31.2 m

(4) 31 200 m

8 Find the value of $703.1 \div 100$.

(1) 7.031

(2) 7.31

(3) 70.31

(4) 70310

9 Express $\frac{18}{25}$ as a percentage.

(1) 18%

(2) 36%

(3) 72%

(4) 90%

10 Which of the following is likely to be the length of 1 ten-dollar Singapore note?

(1) 1.42 cm

(2) 14.2 cm

(3) 1.42 m

(4) 14.2 m

11 The original price of a watch was \$200. The price was reduced to \$160 during a sale. What was the percentage decrease in the price of the watch?

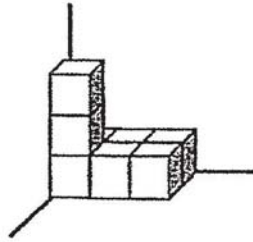
(1) 20%

(2) 25%

(3) 40%

(4) 80%

- 12 How many unit cubes are used to build the solid below?



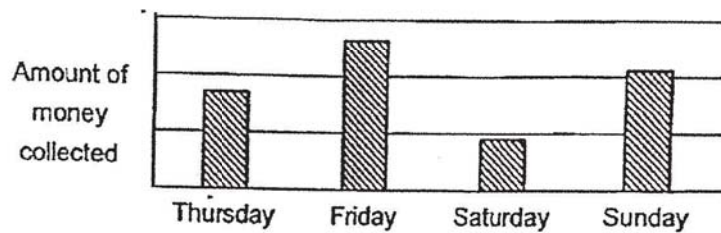
- (1) 5
- (2) 6
- (3) 7
- (4) 8

- 13 The table below shows the amount of money collected from the sale of movie tickets from Thursday to Sunday.

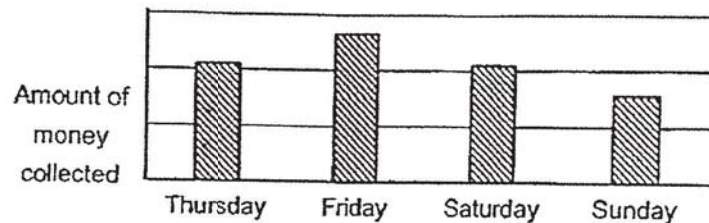
| Day | Thursday | Friday | Saturday | Sunday |
|---------------------------|----------|--------|----------|--------|
| Amount of money collected | \$850 | \$1320 | \$1050 | \$780 |

Which bar graph best represents the information in the table?

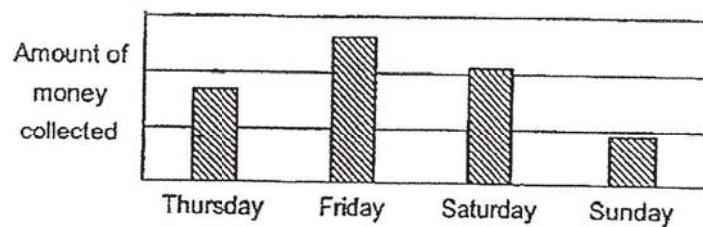
(1)



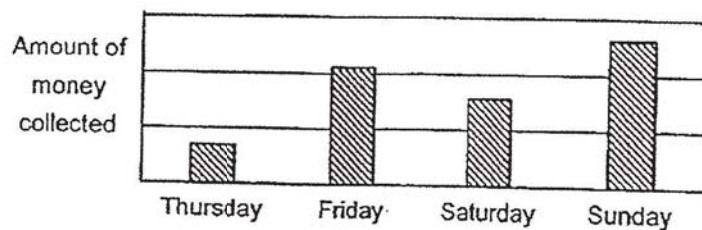
(2)



(3)



(4)



- 14 Miriam had a roll of cloth. She used $\frac{3}{5}$ of it to make a dress and $\frac{1}{3}$ of it to make a skirt. She then used $\frac{1}{4}$ of the remainder to make a tie. Which one of the following expressions correctly shows the amount of cloth she used for the tie?

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

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

(3) $1 - \frac{3}{5} + \frac{1}{3} - \frac{1}{4}$

(4) $1 - \frac{3}{5} - \frac{1}{3} - \frac{1}{4}$

- 15 Look at the pattern below.

| Pattern | Pattern expression | Sum |
|---------|--------------------|-----|
| 1 | 1 | 1 |
| 2 | 1 + 3 | 4 |
| 3 | 1 + 3 + 5 | 9 |
| 4 | 1 + 3 + 5 + 7 | 16 |
| | . | . |
| | . | . |
| | . | . |
| 9 | . | ? |

What is the sum in Pattern 9?

- (1) 25
- (2) 49
- (3) 64
- (4) 81



NANYANG PRIMARY SCHOOL

**TERM 1 WEIGHTED ASSESSMENT
2020**

PRIMARY 6

**MATHEMATICS
PAPER 1
(BOOKLET B)**

Total Duration for Booklets A and B: 1 hour.

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 6 ()

Booklet B

/ 25

Please sign and return the examination paper the next day. Any queries should be raised at the same time when returning the paper.

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

- 16 Find the value of $42 + 5 \times (15 - 6) \div 3$.

Ans: _____

- 17 6 pizzas were shared equally among some children. Each child received $\frac{3}{7}$ of a pizza. How many children received the pizza?

Ans: _____

- 18 Find the missing number in the box.

$$\square \times 3 = 306$$

Ans: _____

- 19 Find the value of $5b + 4 - 2b$ when $b = 6$.

Ans: _____

- 20 There were 800 visitors in a museum. There were 40 girls. What percentage of the visitors was girls?

Ans: _____%

Questions 21 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

- 21 There were some apples in a box. 12% of the apples were rotten. There were 36 rotten apples in the box. How many apples were there in the box?

Ans: _____

- 22 Ju En bought 3.5 kg of rice. She gave some rice to her mother and shared the remaining rice equally with her sister. Her sister received 1100 g of rice. How many kilograms of rice did she give to her mother?

Ans: _____ kg

- 23 In a shop, each box of cookies was sold at \$3. The mass of cookies in each box was $\frac{5}{8}$ kg. Rizal had \$18. How many kilograms of cookies could he buy with all his money?

Ans: _____ kg

- 24 Mrs Joseph had $\frac{4}{5}$ kg of butter. She used $\frac{1}{8}$ kg of the butter to bake a cake. What was the greatest number of such cakes she could bake?

Ans: _____

- 25 The mass of an apple is w kg. The mass of a pineapple is thrice as heavy as the apple. The mass of a durian is 2 kg more than the mass of the pineapple. What is the mass of the durian? Express your answer in terms of w in the simplest form.

Ans: _____ kg

- 26 Emma had \$ y . Gita had twice as much money as Emma. Faith had \$34 more than Emma. The 3 girls had \$154 altogether. How much money did Emma have?

Ans: \$ _____

- 27 The sum of two numbers is 56. The bigger number is 7 times the smaller number. What is the product of the two numbers?

Ans: _____

- 28 Jug A contained 1800 ml of juice and Jug B contained 2.5 l of juice. After some juice was added to Jug B, Jug B had 3 times as much juice as Jug A. How much juice was added to Jug B in millilitres?

Ans: _____ ml

- 29 How many ways are there to form a 4-digit odd number using the digits 3, 4, 5 and 8 without repeating the digits in each number?

Ans: _____

- 30 A florist sells four types of flowers.

| Type of flower | Number of flowers sold |
|----------------|------------------------|
| Rose | 90 |
| Carnation | 180 |
| Sunflower | 30 |
| Tulip | ? |

The table above shows the number of flowers sold in January for three of the four types. In February, the florist sold the same number of tulips as in January but more of the other three types of flowers

Each statement below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) in the correct column.

| Statement | True | False | Not possible to tell |
|--|------|-------|----------------------|
| In January, the number of sunflowers sold was 4 times the number of tulips sold. | | | |
| The percentage of flowers sold that were roses remained the same from January to February. | | | |
| The percentage of flowers sold that were tulips decreased from January to February. | | | |

End of Paper



NANYANG PRIMARY SCHOOL

**TERM 1 WEIGHTED ASSESSMENT
2020**

PRIMARY 6

**MATHEMATICS
PAPER 2**

Duration: 1 hour 30 minutes

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of an approved calculator is expected, where appropriate.

Name: _____ ()

Class: Primary 6 ()

Parent's Signature: _____

| | |
|-----------|-------|
| Booklet A | / 20 |
| Booklet B | / 25 |
| Paper 2 | / 55 |
| Total | / 100 |

Please sign and return the examination paper the next day. Any queries should be raised at the same time when returning the paper.

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

- 1 Ramesh spent $1\frac{1}{2}$ h cleaning the house and $1\frac{3}{8}$ h studying. He then spent $1\frac{1}{3}$ h watching television. How much time did he spend on these three activities? Leave your answer as a mixed number.

Ans: _____ h

- 2 Mr Kang bought 7 bottles of oil. Each bottle contained $2\frac{1}{4}$ l of oil. How many litres of oil did he buy altogether?

Ans: _____ l

- 3 Mr Bala had to pay 7% GST for a shirt he bought. The amount of GST he paid for the shirt was \$17.50. What was the price of the shirt before GST?

Ans: \$ _____

- 4 The average of 7 numbers is 152. The average of the first 6 numbers is 155. What is the 7th number?

Ans: _____

- 5 A group of 6 boys booked a tennis court for 3 hours and took turns to play. At any time, there were 4 boys playing on the court. On average, how long did each boy play on the court? Give your answer in minutes.

Ans: _____ min

For questions 6 to 17, show your working clearly 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. (45 marks)

6 Fatimah spent 40% of her money to buy a story book. She had \$42 left.

- (a) What percentage of her money did she have left?
- (b) How much money did she have at first?

Ans: (a) _____ [1]

(b) _____ [2]

- 7 The table below shows the charges for renting a boat.

| Day | Time | Charge |
|------------|-------------------|-------------------------------|
| Mon to Fri | 10 a.m. to 5 p.m. | \$8 per hour or part thereof |
| | 5 p.m. to 8 p.m. | \$15 per hour or part thereof |
| Sat & Sun | 8 a.m. to 8 p.m. | \$18 per hour or part thereof |

- (a) Hyun Bin rented a boat from 4 p.m. to 6 p.m. on Saturday.
How much did he have to pay?
- (b) On Wednesday, Ye Jin rented a boat and paid a total of \$70.
Find the greatest number of hours she rented the boat.

Ans: (a) _____ [1]

(b) _____ [2]

- 8 A container measuring 40 cm long, 25 cm wide and 50 cm high was $\frac{5}{8}$ filled with water at first.

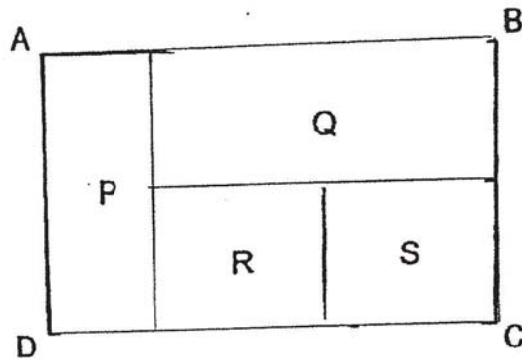
- (a) What was the volume of the water in the tank at first?
- (b) Chang Wook then removed 3.5 ℓ of water from the container. How many more litres of water were needed to fill the container to its brim?

Ans: (a) _____ [1]

(b) _____ [2]

- 9 Rectangle ABCD is made up of four smaller rectangles P, Q, R and S.

The area of P is $\frac{1}{4}$ the area of rectangle ABCD while the area of Q is equal to the total area of R and S. The area of R is equal to the area of S. The area of R is $\frac{1}{10} \text{ m}^2$. Find the area of rectangle ABCD.

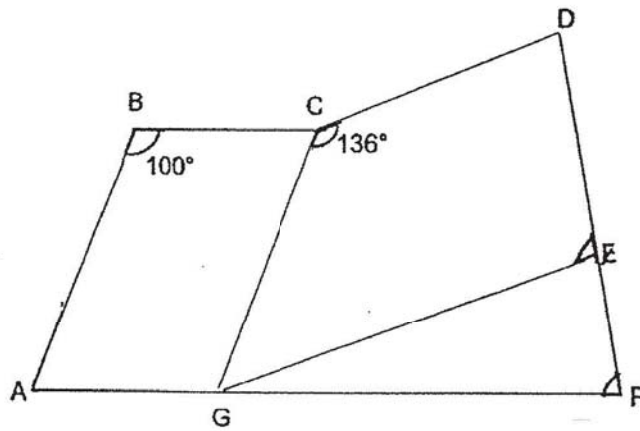


Ans: _____ [3]

- 10 A total of 250 students participated in a Mathematics competition. The average score of the students was 72 marks. The average score of the boys was 65 and the average score of the girls was 90. How many girls participated in the Mathematics competition?

Ans: _____ [3]

- 11 In the figure below, CDEG is a trapezium with CD parallel to GE. ABCG is a parallelogram. EFG is an isosceles triangle and $GE = GF$. AGF and DEF are straight lines. $\angle ABC = 100^\circ$ and $\angle DCG = 136^\circ$.



- (a) Find $\angle EGF$.
 (b) Find $\angle CDF$.

Ans: (a) _____ [2]

(b) _____ [2]

12 Mr Lee is 3 times as old as his daughter now. His daughter is n years old now.

- (a) Find the total age of Mr Lee and his daughter in 9 years' time. Express your answer in terms of n in the simplest form.
- (b) In 9 years' time, the sum of their ages will be 94. How old will Mr Lee be in 9 years' time?

Ans: (a) _____ [2]

(b) _____ [2]

- 13 Kai Ming gave 55% of his salary to his parents and $\frac{1}{3}$ of his remaining salary to his sister. He spent the rest of his salary. He spent \$2450 less than the amount of money he gave to his parents.

- (a) What fraction of Kai Ming's salary was given to his sister?
Give your answer in the simplest form.
- (b) What was Kai Ming's salary?

Ans: (a) _____ [1]

(b) _____ [3]

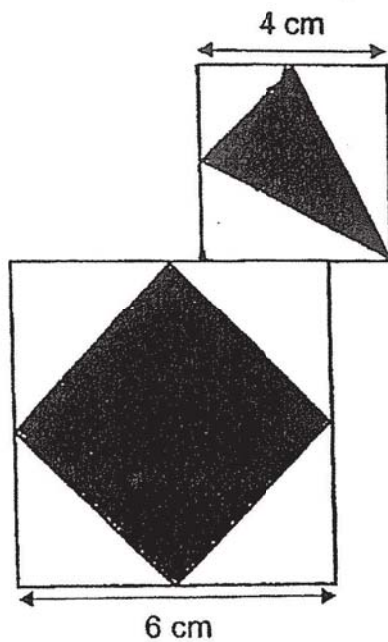
- 14 Mr Azman had 300 stamps. 85% of the stamps were foreign stamps and the rest were local stamps. He gave some foreign stamps to his son and the percentage of foreign stamps he had decreased to 80%. How many foreign stamps did he give to his son?

Ans: _____ [4]

- 15 Marie had an equal number of white beads and black beads. After using $\frac{1}{3}$ of the white beads and $\frac{2}{5}$ of the black beads, she had 4 more white beads than black beads left. How many beads did she use altogether?

Ans: _____ [4]

- 16 The figure below is made up of 2 squares of sides 4 cm and 6 cm. The 2 corners of the triangle in the square touch the midpoint of each side of the 4-cm square. The corners of the shaded square touch the midpoint of each side of the 6-cm square.



- (a) Find the total area of the unshaded parts.
- (b) What fraction of the figure is shaded?

Ans: (a) _____ [3]

(b) _____ [2]

- 17 The table below shows the number of each type of bun sold by a bakery.

| Type of bun | Number of buns sold |
|-------------|---------------------|
| Butter | 84 |
| Kaya | ? |
| Cream | 108 |
| Ham | ? |

The ratio of the number of ham buns sold to the number of butter buns sold was $12 : 7$. The ratio of the number of ham buns sold to the number of kaya buns sold was $18 : 7$.

- (a) How many ham buns were sold?
- (b) How many more butter buns than kaya buns were sold?
- (c) All the cream buns were sold only in boxes. A total of 14 large and small boxes were sold. Each large box contained 12 cream buns while each small box contained 6 cream buns. What was the ratio of the number of large boxes to the number of small boxes sold?

(a) _____ [1]

(b) _____ [2]

(c) _____ [2]

End of Paper

ANSWER KEY

YEAR: 2020

LEVEL: PRIMARY 6

SCHOOL: NANYANG PRIMAR _

SCHOOL

SUBJECT: MATH

TERM: WEIGHTED ASSESSMENT

BOOKLET A

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

BOOKLET B

Q16. $42 + 5 \times 9 \div 3 = 42 + 45 \div 3 = 42 + 15 = 57$

Q17. $6 \div \frac{3}{7} = 6 \times \frac{7}{3} = \frac{42}{3} = 14$

Q18. $306 \div 3 = 102$

Q19. $5b - 2b + 4 = 3b + 4 = 3b + 4 = 18 + 4 = 22$

Q20. $\frac{40}{800} \times 100 = 5\%$

Q21. $12\% \rightarrow 36$

$1\% \rightarrow 36 \div 12 = 3$

$100\% \rightarrow 3 \times 100 = 300$

Q22. $1100 \times 2 = 2200$

$3.5 - 2.2 = 1.3 \text{ kg}$

Q23. $18 \div 3 = 6$

$6 \times \frac{5}{8} = \frac{30}{8} = 3\frac{3}{4}$

Q24. $\frac{4}{5} \div \frac{1}{8} = \frac{32}{5} = 6$

Q25. $3 \times w = 3w$ (pineapple)

$3w + 2 = 3w + 2\text{kg}$ (durian)

Q26. $y \times 2 = 2y$

$y + 34 = y + 34$

$154 - 34 = 120$

$2y + y + y = 4y$

$120 \div 4 = \$30$

Q27. $7 + 1 = 8$

$56 \div 8 = 7$

$7 \times 7 = 49$

$7 \times 1 = 7$

$49 \times 7 = 343$

Q28. $1800 \times 3 = 5400$

$5400 - 2500 = 2900\text{ml}$

Q29. 12

Q30. False

Not possible to tell

True

Paper 2

Q1. $1\frac{1}{2} + 1\frac{3}{8} + 1\frac{1}{3} = 4\frac{5}{24}h$

Q2. $7 \times 2\frac{1}{4} = 15\frac{3}{4}$

Q3. $7\% \rightarrow \$17.50$

$100\% \times \frac{17.5}{7} \times 100 = \250

Q4. $152 \times 7 = 1064$

$155 \times 6 = 930$

$1064 - 930 = 134$

Q5. $6b \rightarrow 3h$

$4b \rightarrow \frac{1}{2} \times 4 = 2$

$2h = 120\text{min}$

Q6. $100 - 40 = 60$

$60\% \rightarrow \$42$

$100\% \rightarrow \frac{42}{60} \times 100 = 70$

a) 60%

b) \$70

Q7. $18 \times 2 = 36$

$8 \times 5 = 40$

$70 - 40 = 30$

$30 \div 15 = 2$

$2 + 5 = 7$

$40 + 30 = 70$

a) \$36

b) 7h

$$\text{Q8. } \frac{5}{8} \times 50 = 31.25$$

$$31.25 \times 25 \times 40 = 31250$$

$$31250 \text{ cm}^3 = 31.25 \text{ l}$$

$$31.25 - 3.5 = 27.75$$

$$40 \times 25 \times 50 = 50000$$

$$50000 \text{ cm}^3 = 50 \text{ l}$$

$$50 - 27.75 = 22.25$$

$$\text{a) } 31250 \text{ cm}^3$$

$$\text{b) } 22.25 \text{ l}$$

$$\text{Q9. } \frac{1}{10} \div 3 = 1 \frac{1}{30}$$

$$\frac{1}{30} \times 16 = \frac{8}{15}$$

$$\frac{3}{4} \rightarrow Q + R + S = \frac{2}{10} + \frac{1}{10} + \frac{1}{10} = \frac{4}{10} = \frac{2}{5}$$

$$\left(\frac{1}{4}\right)P \rightarrow \frac{2}{5} \div 3 = \frac{2}{15}$$

$$\left(\frac{4}{4}\right) \rightarrow \frac{2}{15} \times 4 = \frac{8}{15} \text{ m}^2$$

Q10. Assume all boys

$$72 \times 250 = 18000$$

$$65 \times 250 = 16250$$

$$18000 - 16250 = 1750$$

$$90 - 65 = 25$$

$$1750 \div 25 = 70$$

$$\text{Q11. } 180 - 100 = 80$$

$$180 - 136 = 44$$

$$80 - 44 = 36$$

$$180 - 36 = 144$$

$$144 \div 2 = 72$$

$$180 - 72 = 108$$

$$180 - 108$$

$$180 - 108 = 72$$

$$\text{a) } 36^\circ$$

$$\text{b) } 72^\circ$$

Q12. $3 \times n = 3n$

$3n + n = 4n$

$9 + 9 = 18$

$4n + 18 = 4n + 18$

$94 - 18 = 76$

$76 \div 4 = 19$

$19 \times 3 = 57$

$57 + 9 = 66$

a) $4n + 18$

b) 66

Q13. $100 - 55 = 45$

$\frac{1}{3} \times 45 = 15$

$100 - 55 - 15 = 30$

$55 - 30 = 25$

$25\% \rightarrow \$2450$

$100\% \rightarrow \frac{2450}{25} \times 100 = 9800$

a) $\frac{3}{200}$

b) \$9800

Q14. $100 - 85 = 15$

$\frac{85}{100} \times 300 = 255$

$\frac{15}{100} \times 300 = 45$

$100 - 80 = 20$

$20\% \rightarrow 45$

$80\% \rightarrow \frac{45}{20} \times 80 = 180$

$255 - 180 = 75$

$$\text{Q15. } \frac{2}{3} \rightarrow \frac{3}{5}$$

$$\frac{10}{15} \Rightarrow \frac{9}{15} + 4$$

$$1u \rightarrow 4$$

$$6+5=11$$

$$11u \rightarrow 11 \times 4 = 44$$

$$W: \frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$$

$$B: \frac{2}{5} \times \frac{1}{2} = \frac{1}{5}$$

$$W: 1 - \frac{1}{6} = \frac{5}{6}$$

$$B: 1 - \frac{1}{5} = \frac{4}{5}$$

$$\frac{5}{6} - \frac{4}{5} = \frac{1}{30}$$

$$\frac{1}{30} \rightarrow 4$$

$$\frac{11}{30} \rightarrow 4 \times 11 = 44$$

$$\text{Q16. } 6 \div 2 = 3$$

$$A \rightarrow \frac{1}{2} \times 2 \times 2 = 2$$

$$B \rightarrow \frac{1}{2} \times 2 \times 4 = 4$$

$$\frac{1}{2} \times 3 \times 3 = 4.5$$

$$4.5 \times 4 = 18$$

$$18 + 2 + 4 + 4 = 28$$

$$6 \times 6 = 36$$

$$4 \times 4 = 16$$

$$36 + 16 = 52$$

$$52 - 28 = 24$$

$$\frac{24}{52} = \frac{6}{13}$$

$$a) 28 \text{ cm}^2 \quad b) \frac{6}{13}$$

Q17. $84 \div 7 = 12$

$12 \times 12 = 144$

$144 \div 18 = 8$

$8 \times 7 = 56$

$84 - 56 = 28$

$14 \times 12 = 168$

$168 - 108 = 60$

$12 - 6 = 6$

$60 \div 6 = 10$

$14 - 10 = 4$

$4:10 = 2:5$

a) 144

b) 28

c) 2:5

7.
END

