METHODIST GIRLS' SCHOOL (Primary)
End-Of-Year Examination 2007
Primary 5

Mathematics

Booklet A

Name: _____ ( )

Class: P 5. _____

Total time for Booklets A, B1 and B2: 2h 15 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW THE INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

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). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1. What is the missing number in the blank?

$24\,856 = 20\,000 + 4\,000 + \_\_\_\_\_ + 50 + 6$

(1) 80
(2) 800
(3) 8 000
(4) 80 000

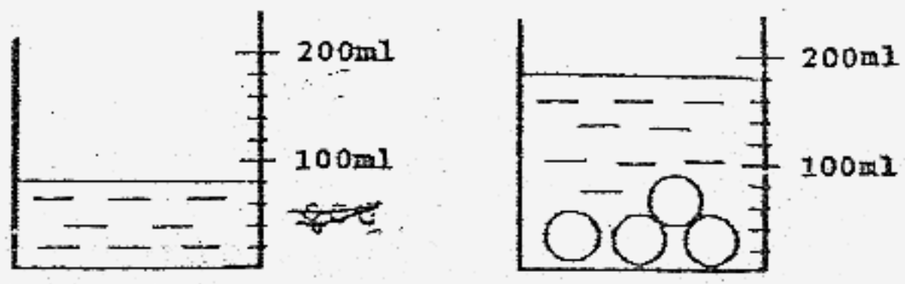
2. Evaluate $(92 - 68 \div 4) - 15 \times 3$

(1) 30
(2) 39
(3) 86
(4) 180

3. What is the average of all the even numbers from 1 to 10?

(1) 5
(2) 5.5
(3) 6
(4) 15

4. Janet poured some water into a beaker.
She then added 4 identical marbles into it.
Find the volume of 1 marble. ($1ml = 1\text{cm}^3$)



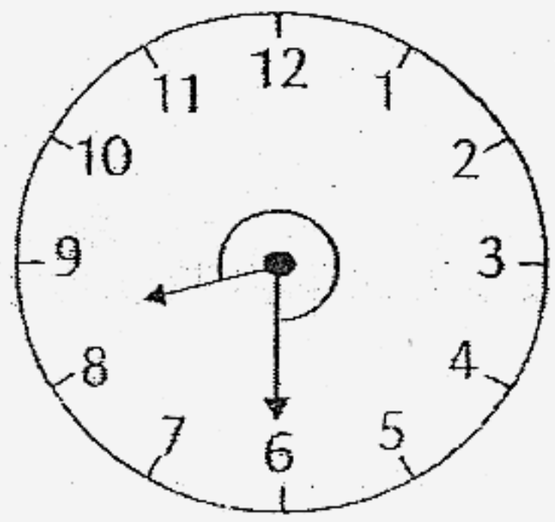
(1) 25 cm^3
(2) 80 cm^3
(3) 100 cm^3
(4) 180 cm^3

(Go on to the next page)

5. A printer took 3 hours to print 270 copies.
The same printer printed 160 copies in the next 2 hours.
Find the average number of copies the printer printed in 1 hour.

(1) 86
(2) 90
(3) 170
(4) 226

6. The time shown below is 8.30 a.m. The larger angle formed by the hour and minute hands is between _____.



(1) 0° and 90°
(2) 90° and 180°
(3) 180° and 270°
(4) 270° and 360°

7. Lily has 60 stamps. Meiling has 24 more stamps than Lily.
The ratio of the number of stamps that Lily has to the number of stamps that Meiling has is _____.

(1) 2 : 5
(2) 5 : 2
(3) 5 : 7
(4) 7 : 5

8. Joanne reads an average of 25 pages of a book in 1 day.
How many pages will she read in 2 weeks?

(1) 50
(2) 175
(3) 250
(4) 350

(Go on to the next page)

9. A machine can fill 450 bottles of soft drinks in 5 minutes.
How many bottles of soft drinks can it fill in 3 minutes?

(1) 90
(2) 180
(3) 270
(4) 360

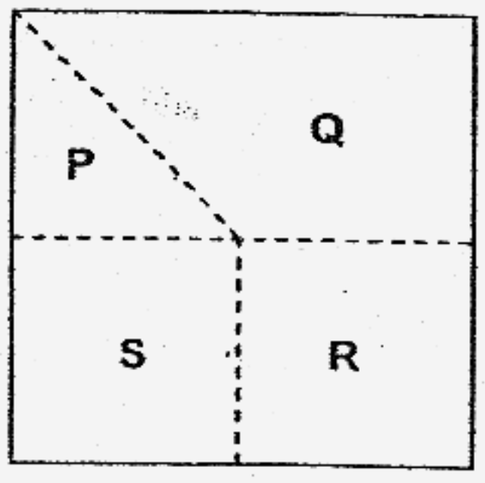
10. There were 15 girls and 25 boys in a club.
If 10 more girls joined the club, what percentage of the children in the club are girls?

(1) 30%
(2) 37.5%
(3) 50%
(4) 62.5%

11. Janice has $48. Hillary has $16 more than Janice.
Devi has twice as much money as Hillary.
How much money do they have altogether?

(1) $144
(2) $180
(3) $208
(4) $240

12. The figure below is a square made up of four parts, P, Q, R and S.
R and S are squares and each is $\frac{1}{4}$ of the figure.



Which of the following two parts will add up to $\frac{3}{8}$ of the figure?

(1) P and Q
(2) P and S
(3) Q and R
(4) R and S

(Go on to the next page)

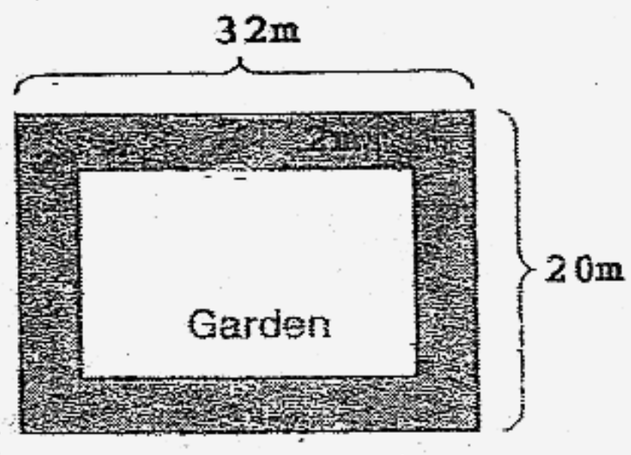
13. The table shows the parking charges at a car park.

Parking Charges	
For the first hour	$2.00
For every additional $\frac{1}{2}$ hour	$1.50

Mrs Lim parked her car from 9.00 a.m. to 11.30 a.m.
How much did she pay?

(1) $ 3.50
(2) $ 5.50
(3) $ 6.00
(4) $ 6.50

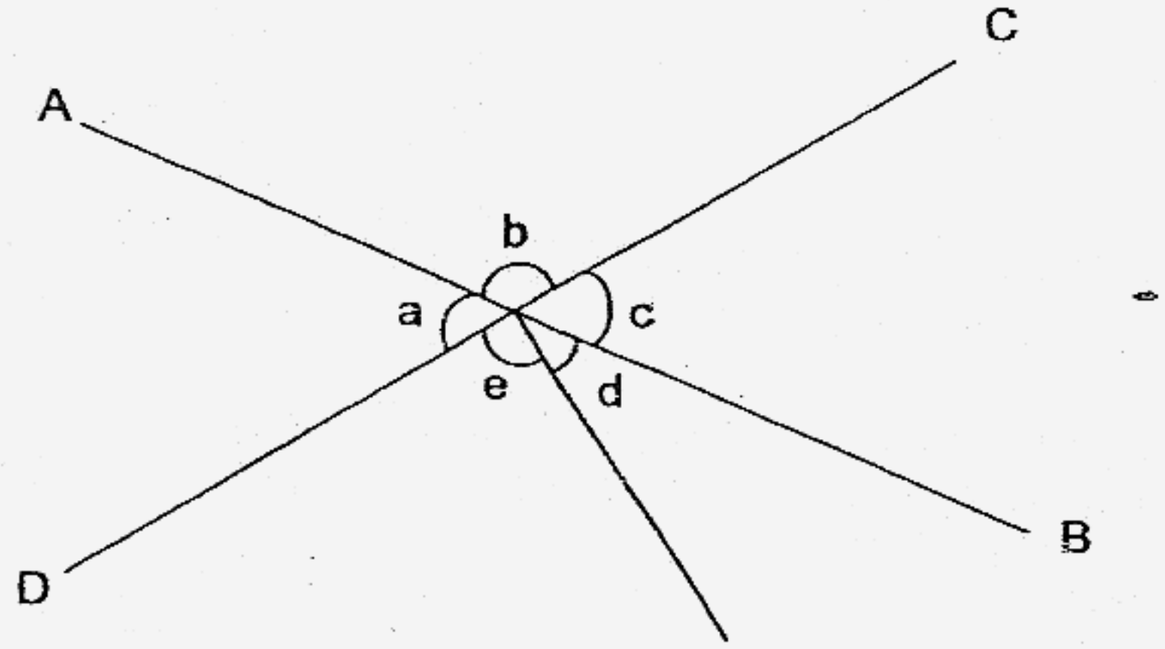
14. The garden below is surrounded by a 2-m footpath. Find the area of the garden.



(1) 448 m^2
(2) 540 m^2
(3) 600 m^2
(4) 640 m^2

(Go on to the next page)

15. AB and CD are straight lines.
Which angle is equal to ∠ a?



(1) ∠ b
(2) ∠ c
(3) ∠ d
(4) ∠ e

(Go on to the next page)

METHODIST GIRLS' SCHOOL (Primary)
End-Of-Year Examination 2007
Primary 5

Mathematics

Booklet B1

Name: _____ ( )

Class: P 5. _____

Booklet B1 (30)	

Total time for Booklets
A, B1 and B2: 2h 15 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW THE INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

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. What is seven million and sixteen thousand written in numerals?

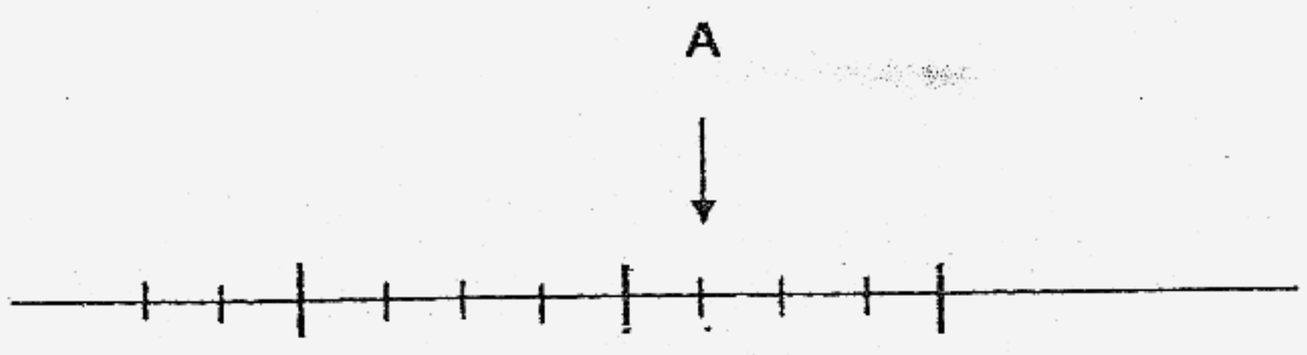
Ans: _____

17. Use the following digits to form the smallest four-digit whole number that is divisible by 5.

3	9	5	0

Ans: _____

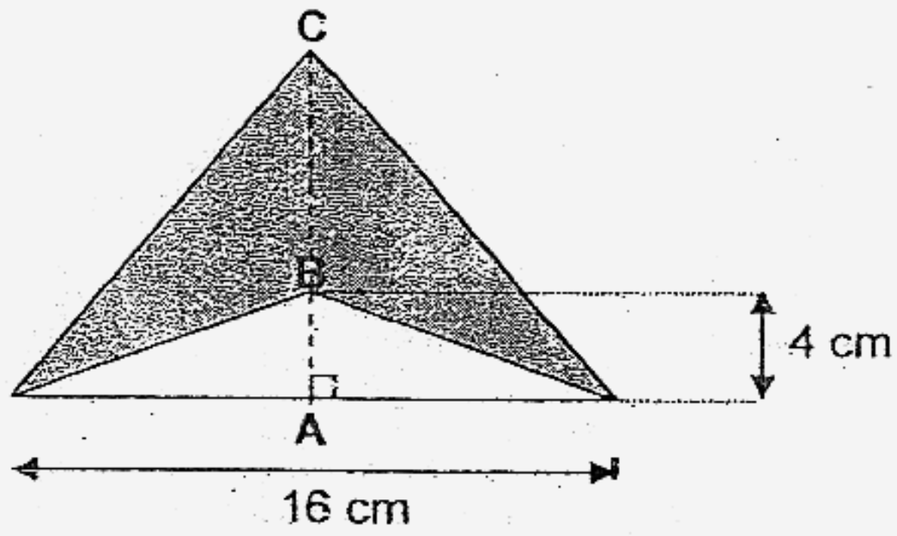
18. What is the fraction represented by A?



$1\frac{1}{4}$ $1\frac{1}{2}$

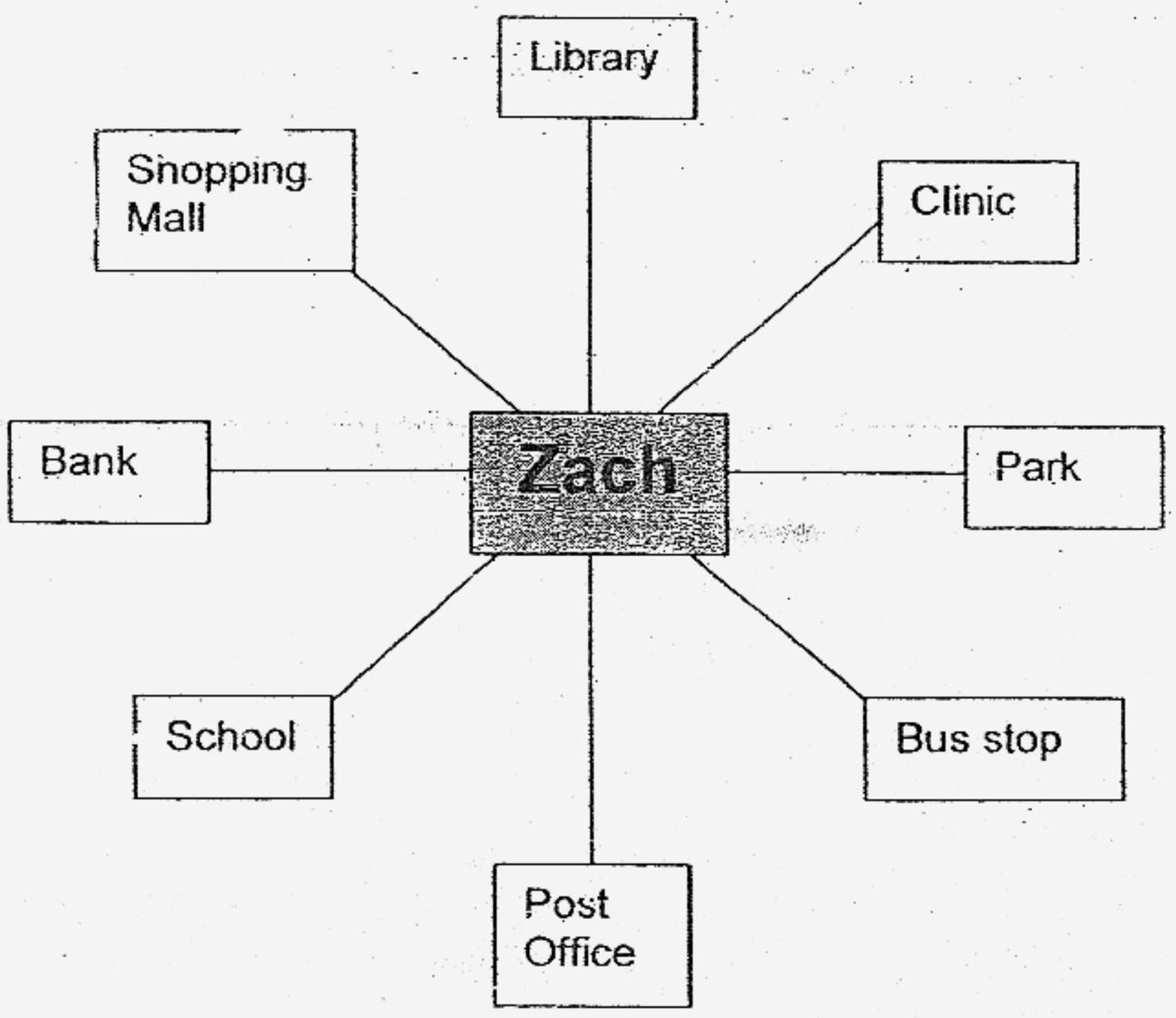
Ans: _____

19. The length of BC is twice that of AB.
Find the area of the shaded region.



Ans: _____ cm^2

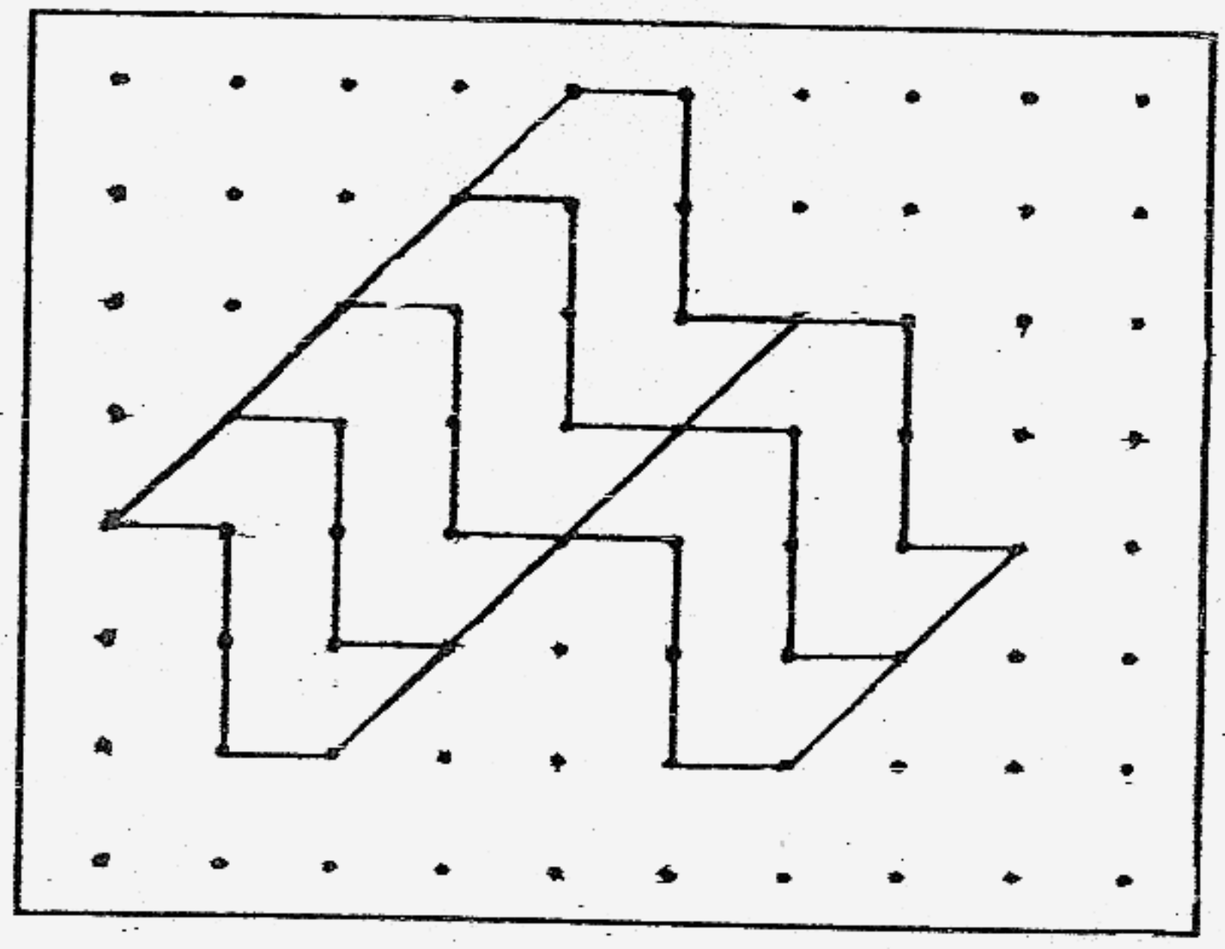
20. If Zach turns 225° anti-clockwise, he will be facing the Park.
Where is he facing now?



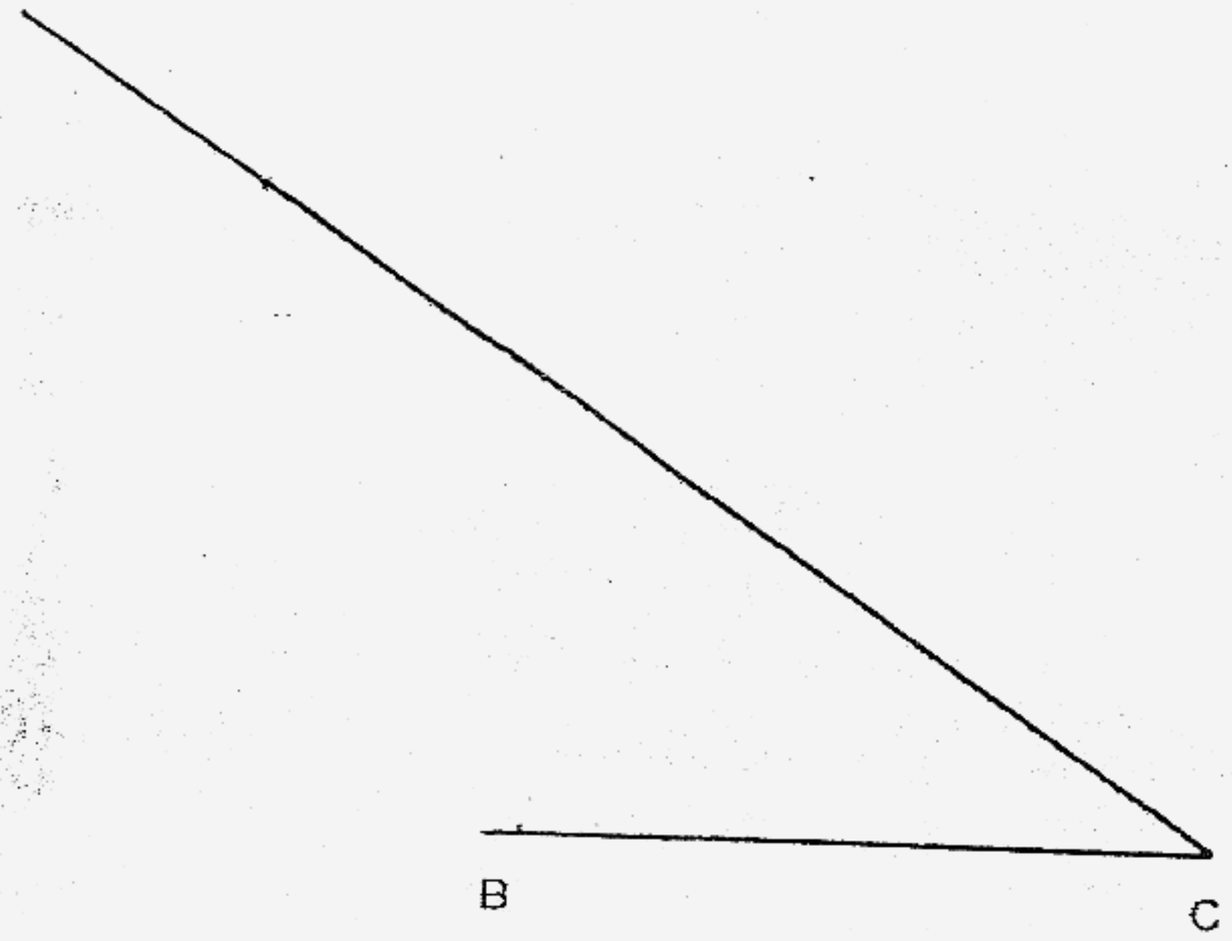
Ans: _____

(Go on to the next page)

21. The pattern in the box shows part of a tessellation.
Extend the tessellation by drawing <u>two</u> more unit shapes in the space provided in the box.



22. In the space below, draw triangle ABC in which $\angle$ ABC is 110°.



(Go on to the next page).

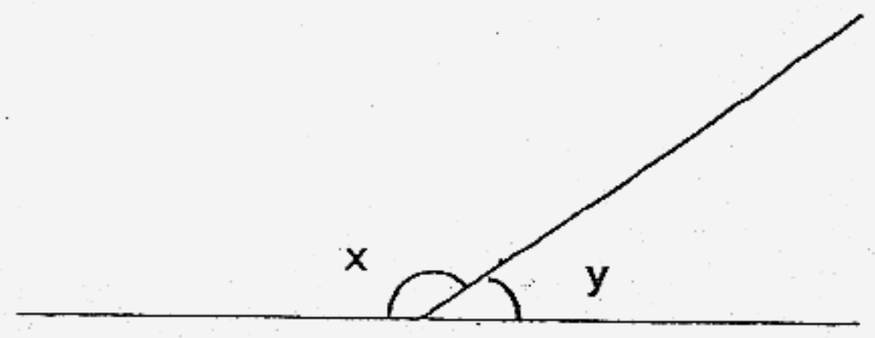
23. Divide 7.212 by 12.

Ans: _____

24. Three boys shared $\frac{6}{7}$ of a pizza.
What fraction of the pizza did each boy get?

Ans: _____

25. The figure below is not drawn to scale.
$\angle x$ is three times $\angle y$.
Find $\angle x$.



Ans: _____ °

(Go on to the next page)

Questions **26** to **35** carry 2 marks each. Show your working 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.

(20 marks)

26. Mrs Lim has some sweets for her class.
If she gives each pupil 3 sweets, she will have 5 extra sweets.
If she gives 5 sweets to each pupil, she will need 45 more sweets.
How many pupils are there in Mrs Lim's class?

Ans: _____

27 Mary is 12 years old and her mother is 46 years old this year.
How many years later will Mary's mother be 3 times as old as she?

Ans: _____ years

(Go on to the next page)

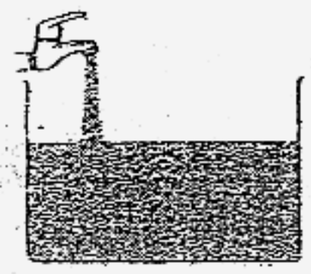
28. $\frac{1}{2}$ of a number is 48.

What is $\frac{7}{8}$ of the number?

Ans: _____

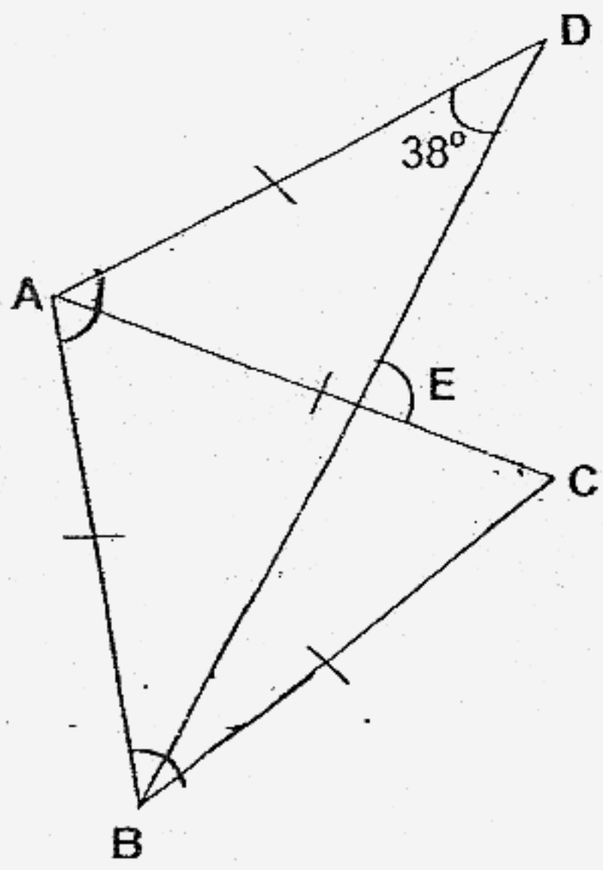
29. A tap can fill $\frac{1}{4}$ of a tank in 6 minutes.

How long will it take to fill 3 similar tanks?



Ans: _____ min

30. ABC is an equilateral triangle and AC = AD. Find ∠DEC.



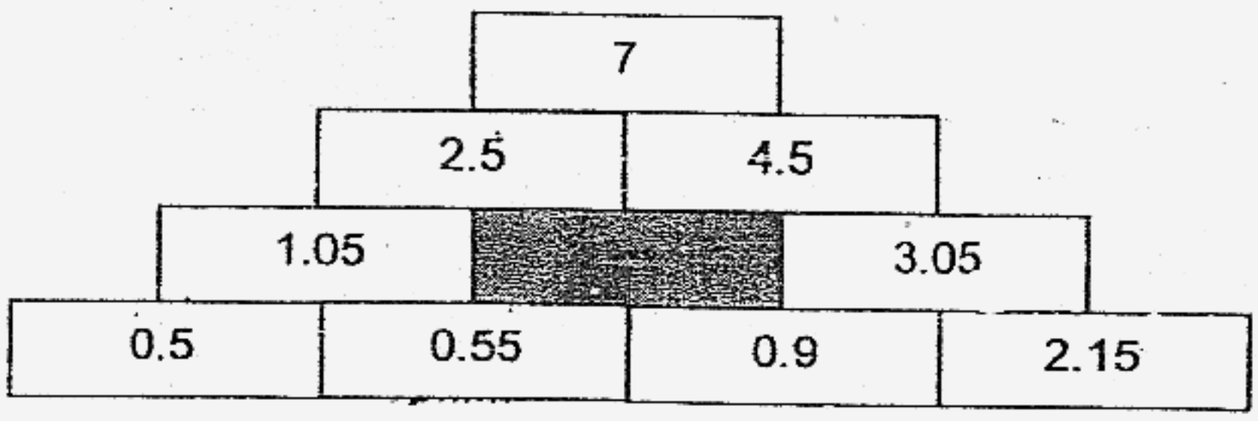
Ans: _____ °

(Go on to the next page)

31. The ratio of the number of Malay books to the number of Chinese books in a library is 1 : 4.
The ratio of the number of Chinese books to the number of English books is 2 : 5.
How many books are there altogether if there are 270 more English books than Malay books in the library?

Ans: _____

32. What is the number in the shaded box?



Ans: _____

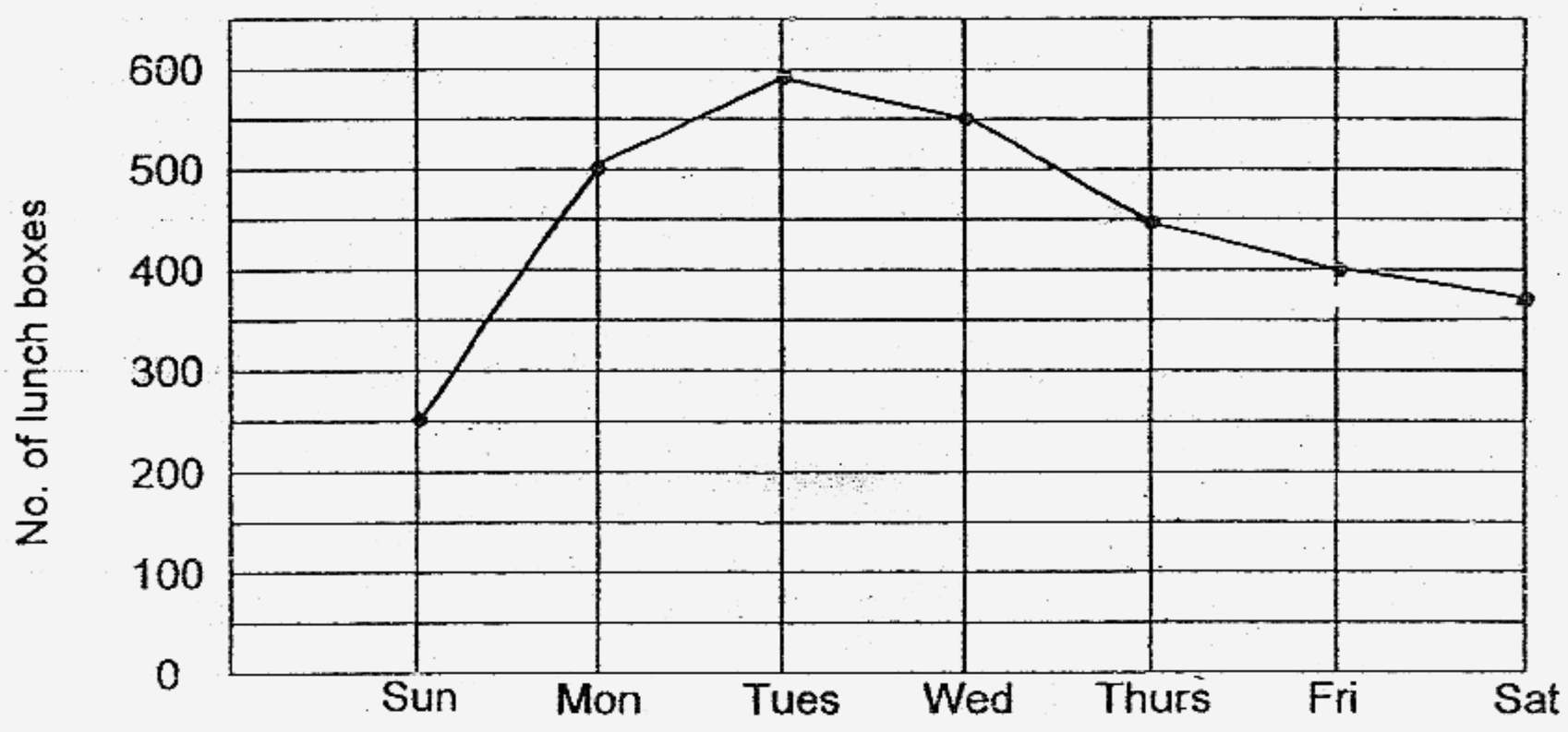
33. After a 10% discount, the selling price of a watch was $117.
What would be the selling price if the discount had been 20% instead?

Ans: $_____

(Go on to the next page)

The graph below shows the number of lunch boxes sold in a Japanese fast food shop in a week.

Study the graph carefully and answer questions 34 and 35.



34. On which day was the number of lunch boxes sold twice as many as the number sold on Sunday?

Ans: _____

35. What would the total collection for Saturday be if each lunch box was sold at $6.50?

Ans: $ _____

METHODIST GIRLS' SCHOOL (Primary)
End-Of-Year Examination 2007
Primary 5

Mathematics

Booklet B2

Name: _____ ( )

Class: P 5. _____

Total time for Booklets
A, B1 and B2: 2h 15 min

Booklet A (20)	
Booklet B1 (30)	
Booklet B2 (50)	
Total: (100)	

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW THE INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

For questions **36** to **48**, 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 the brackets [ ] at the end of each question or part-question.

(50 marks)

36. Lina spent $\frac{1}{2}$ of her money to buy a dress and $\frac{1}{3}$ of the remaining amount to buy a bag. She then had $56 left. How much money did she have at first?

Ans: _____ [3]

37. The ratio of Tom's money to Paul's money was 4 : 3 at first.
After Tom spent $140, the ratio of Tom's money to Paul's money became 2 : 5.
How much money did Tom have at first?

Ans: _____ [3]

(Go on to the next page)

38. Siti spilled some coffee on her results slip. Her average mark for the three subjects is 86.
What can be the **largest difference** between her English and Mathematics marks?

Results Slip

English	8
Mathematics	7
Science	9 2

Ans:-_____[3]

39. A car travels 36 km on 3 litres of petrol. The cost of petrol is $1.60 per litre.
How much does a motorist have to pay for petrol if he wants to travel 240 km?

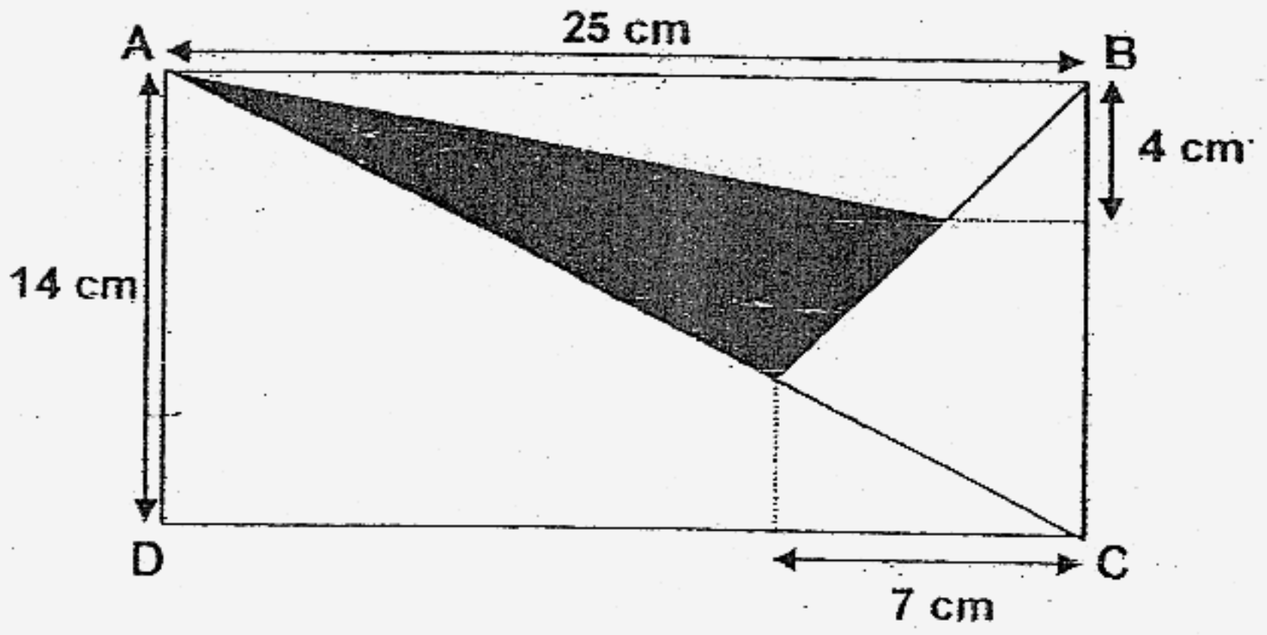
Ans: _____[3]

(Go on to the next page)

40. Lisa put 19 oranges in bag A, 24 oranges in bag B, 15 oranges in bag C and 80 oranges in bag D. Cindy added an equal number of apples into each of the bags. As a result, bag D contained the same number of fruits as the total number of fruit in bags A, B and C.
How many apples did Cindy put into each bag?

Ans: _____[3]

41. ABCD is a rectangle.
Find the area of the shaded part



Ans: _____[4]

(Go on to the next page)

42. A tank measuring 30 cm by 20 cm by 27 cm contained 9.675 litres of water. When 9 cubes of the same size were placed into the tank, the water level rose to $\frac{2}{3}$ the height of the tank (as shown in figure A).

Find the length of each cube.

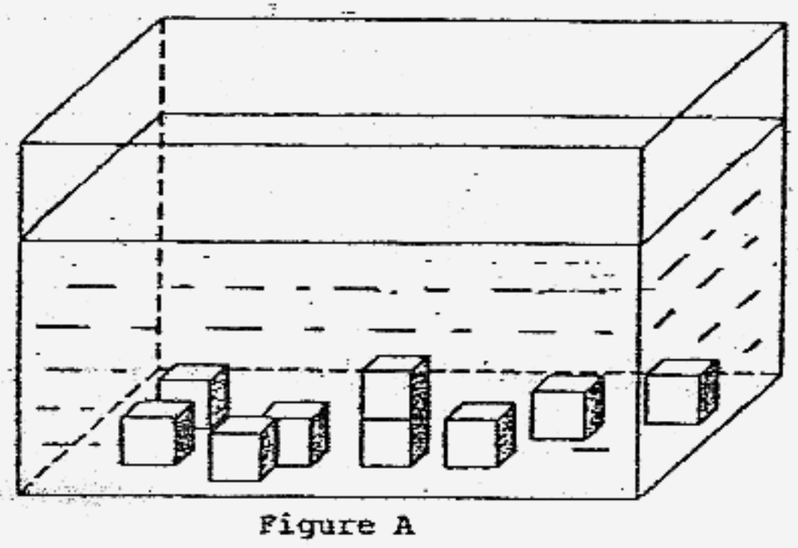
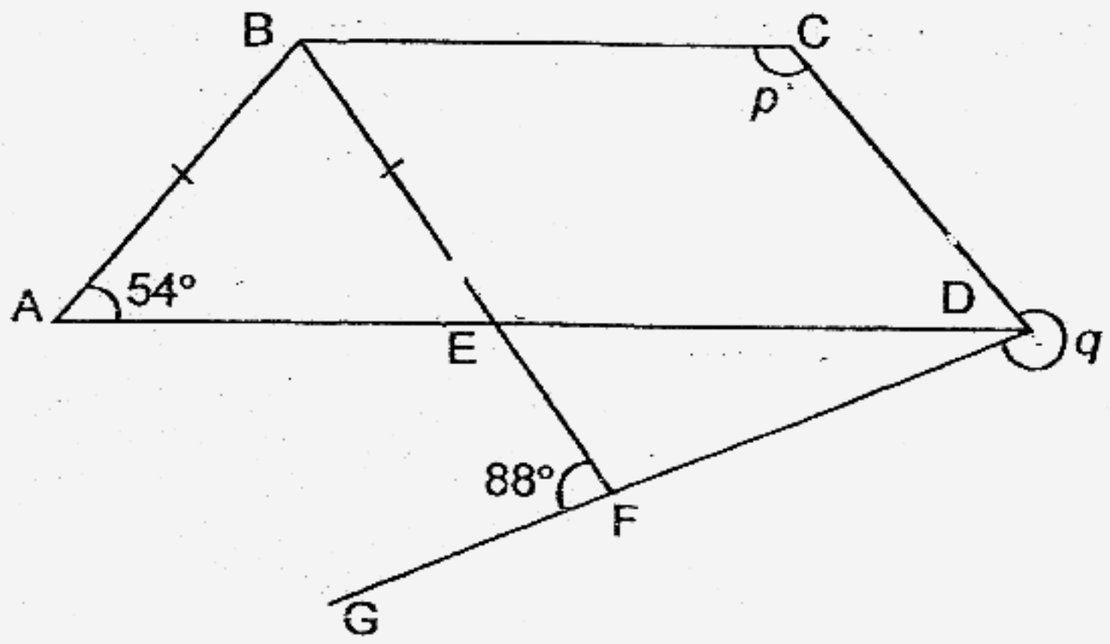


Figure A

Ans: _____ [4]

(Go on to the next page)

43. The figure below is not drawn to scale.
BCDE is a parallelogram. AB = BE.
AED, BEF and DFG are straight lines.
Find $\angle p$ and $\angle q$.

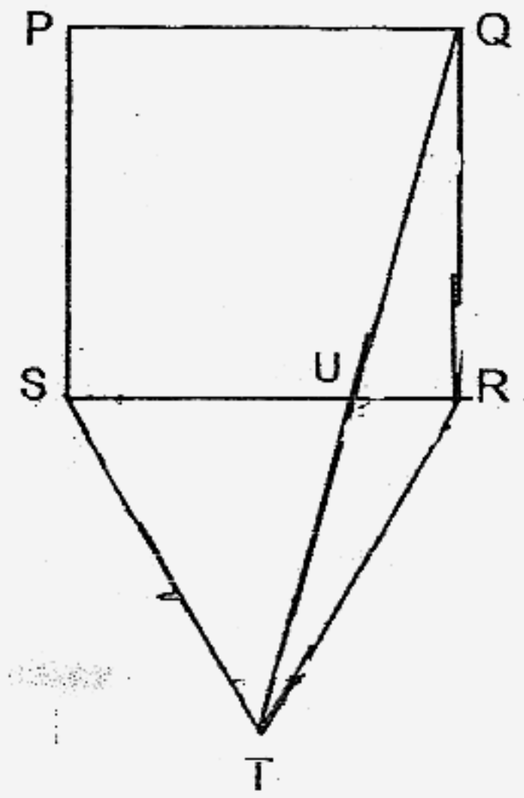


Ans: $\angle p$ = _____ [2]

$\angle q$ = _____ [2]

(Go on to the next page)

44. In the diagram below, not drawn to scale,
PQRS is a square and RST is an equilateral triangle.
Find $\angle$ QUR.



Ans: _____ [4]

(Go on to the next page)

45. Jie Min paid $13.45 for some pencils and erasers.
Each pencil cost $0.65 and each eraser cost $0.40 less.
How many pieces of erasers did she buy if there were 11 more pencils than erasers?

Ans: _____ [4]

(Go on to the next page)

46. The price of tickets to a concert is shown below.

Adult	$25
Child	$11

A group of 85 people paid a total of $1 355 to attend the concert.
How many children attended the concert?

Ans: _____[5]

(Go on to the next page)

47. Sandy had some sweets. She kept $\frac{1}{2}$ of the sweets plus 7 sweets.
She then gave the remaining sweets to Betty.
Betty kept $\frac{1}{2}$ of her sweets plus 8 sweets and gave the remainder to Pauline.
Pauline ate $\frac{1}{4}$ of her share and found that she had 15 sweets left.
(a) How many sweets did Pauline have?
(b) How many sweets did Sandy have at first?

Ans: a) _____ [2]

b) _____ [3]

(Go on to the next page)

48. Free gifts were being given out at a departmental store.
10% of the gifts were claimed on Wednesday.
The number of gifts claimed on Thursday was 6 more than the gifts claimed on Wednesday.
The number of gifts claimed on Friday was $\frac{2}{3}$ of those claimed on Saturday.
$\frac{4}{25}$ of the gifts were claimed on Sunday.
If 54 gifts were claimed on Saturday, how many free gifts were claimed in total?

Ans: _____[5]

☆ End of Paper ☆
Please check your work.

Methodist Girls' Primary School

Primary 5 Maths SA2 Exam (2007)

Answer Keys

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

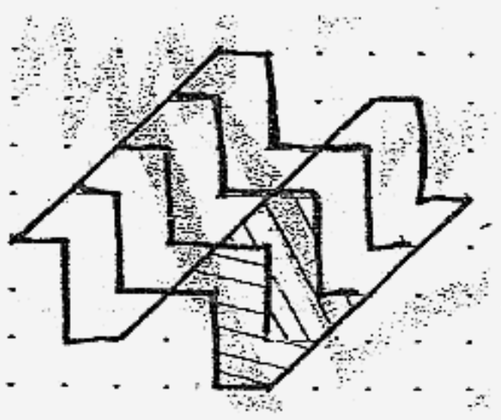
16. **7016000**

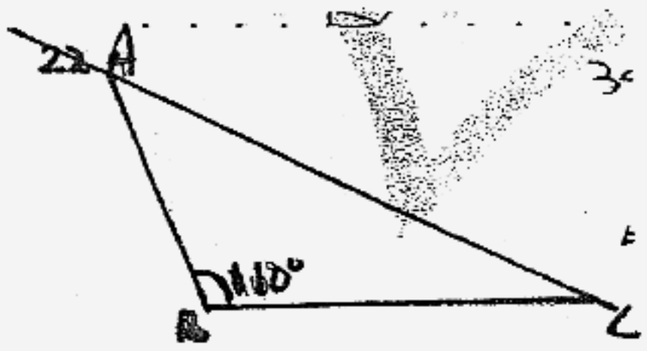
17. **3095**

18. $1\frac{9}{16}$

19. **64cm²**

20. **shopping mall**

21. 

22. 

23. **0.601**

24. $\frac{2}{7}$

25. **135°**

26. **25 pupils**

27. **5 years**

28. **84**

29. **72 mins**

30. 82°

31. 450 books

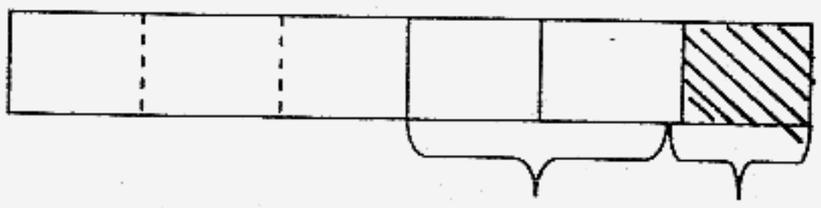
32. 1.45

32. $104

34. Monday

35. $2437.50

36.



$56 $\frac{1}{3}$ spent

2 units = $56
6 units = $28 x 6
= $168

37.

Tom	:	Paul
4	:	3
x 5		x 5
20	:	15

20 units − 6 units = 14 units
14units = $140
1unit = $10
20 units = $10 x 20
= $200

Tom	:	Paul
2	:	5
x 3		x 3
6	:	15

38. Total marks = 86 x 3 = 258
258 − 92 = 166
If 166 = 89 (English) + 77 (Maths)
= 89 − 72
= 12

39. 36 ÷ 3 = 12km
1L = 12km
$\frac{240}{12}$ x $1.60 = $32

40. Let A be the no. of apples
(19 + A) + (24 + A) + (15 + A) = 80 + A
3A + 58 = 80 + A
3A − A = 80 − 58
2A = 22
A = 11

41. Area of rect. = 45 x 14
= 250cm²

Area of A = $\frac{14}{2}$ x 25 = 175cm²

Area of B = $\frac{14}{2}$ x 7 = 49cm²

Area of C = $\frac{25}{2}$ x 4 = 50cm²

Area of shaded part = 350 − (175 + 49 + 50)cm²
= 76cm²

42. $\frac{2}{3}$ x 27 = 18
Vol. of water and cubes = 30 x 20 x 18 = 10800
Vol. of cubes = 10800 − 9675 = 1125
Vol. of 1 cube = 1125 ÷ 9 = 125
5 x 5 x 5 = 125
The length is 5cm

43. ∠P = 180° − 54° = 126°
∠P = 126°
∠CDF = 88°
∠q = 360° − 88°
= 272°

44. (90 + 60)° = 150°
(180 − 150)° = 30°
30° ÷ 2 = 15°
(90 − 15)° = 75°
The angle is 75°

45. Pencil = $0.65
Eraser = $0.25
$0.65 x 11 = $7.15
$(13.45 − 7.15) = $6.30
$(0.25 + 0.65) = $0.90
630 ÷ 90 = 7
There are 7 erasers.

46. 85 x 11 = 935
1355 − 935 = 420
25 − 11 = 14
420 ÷ 14 = 30
85 − 30 = 55
55 children paid to watch the concert.

47a. 15 ÷ 3 = 5
5 x 4 = 20
Pauline had 20 sweets

47b. 20 + 8 = 28
28 x 2 = 56
56 + 7 = 63
63 x 2 = 126
Sandy had 126 sweets.

48. Wed = 10%
Thurs = 10% + 6
Fri = $\frac{2}{3}$ x 54 = 36
Sat = 54
Sun = 16%
(100 − 10 − 10 − 16)% = 64%
64% = 6 + 36 + 54 = 96
1% = 1.5%
100% = 150
150 gifts were claimed.