

Tao Nan School
P5 Mathematics End-of-Year Examination – 2006

Name : _____ () Date : 27 October 2006
Class : Primary 5 () Time : 8.00 a.m.-10.15 a.m.
Marks : _____ / 100

SECTION A (20 marks)

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 correct oval on the Optical Answer Sheet.

1) In 2 879 543, the digit 8 stands for _____.

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

2) Find the value of 5000×70

- (1) 120 000
- (2) 350 000
- (3) 570 000
- (4) 750 000

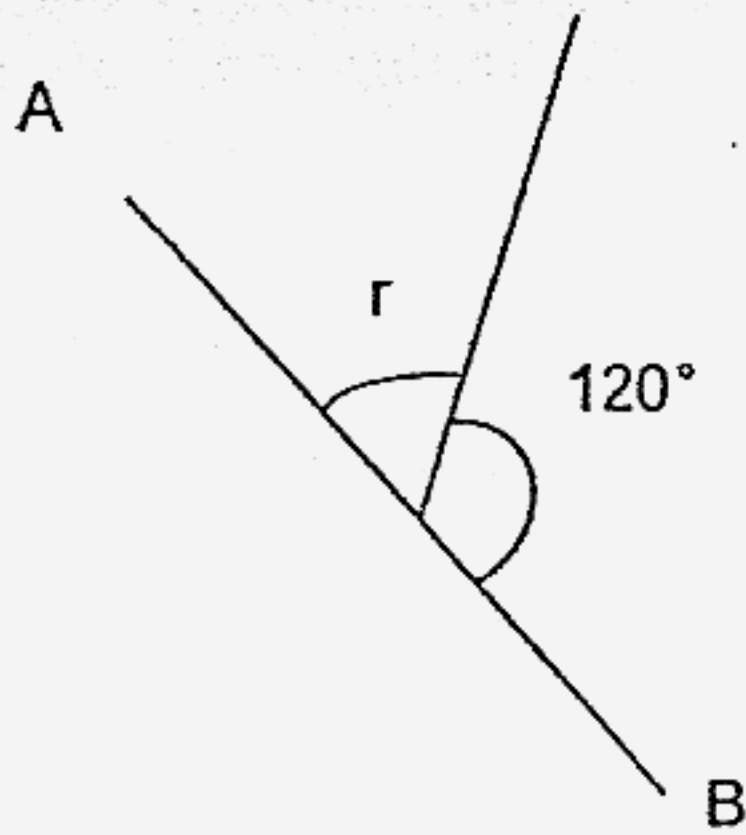
3) Divide 485 by 7. The remainder is _____.

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

4) The average cost of 7 magazines is \$8.40. What is the total cost of the magazines?

- (1) \$1.20
- (2) \$1.40
- (3) \$15.40
- (4) \$58.80

5) The figure below is not drawn to scale. AB is a straight line. What is the value of $\angle r$?



- (1) 40°
- (2) 60°
- (3) 140°
- (4) 160°

6) Express 25cm as a percentage of 5m.

- (1) 5%
- (2) 20%
- (3) 50%
- (4) 125%

7) If 200g of flour costs \$2.10, how much does 1kg of flour cost?

- (1) \$1.05
- (2) \$4.10
- (3) \$10.50
- (4) \$21.00

8) Darren bought 4kg of onions. He used $\frac{3}{8}$ of it for his cooking. How many kilograms of onions had he left?

- (1) $\frac{5}{8}$ kg
- (2) $1\frac{1}{2}$ kg
- (3) $2\frac{1}{2}$ kg
- (4) $3\frac{5}{8}$ kg

9) What is the maximum number of 2-cm cubes that can be put into a container of 6cm by 4cm by 2cm?

- (1) 6
- (2) 12
- (3) 24
- (4) 32

10) 32% of a group of 50 pupils failed a test. How many of them passed the test?

- (1) 16
- (2) 18
- (3) 32
- (4) 34

11) The difference between 2 numbers is 144. If the bigger number is 5 times as big as the smaller number, find the sum of the 2 numbers.

- (1) 175
- (2) 180
- (3) 216
- (4) 278

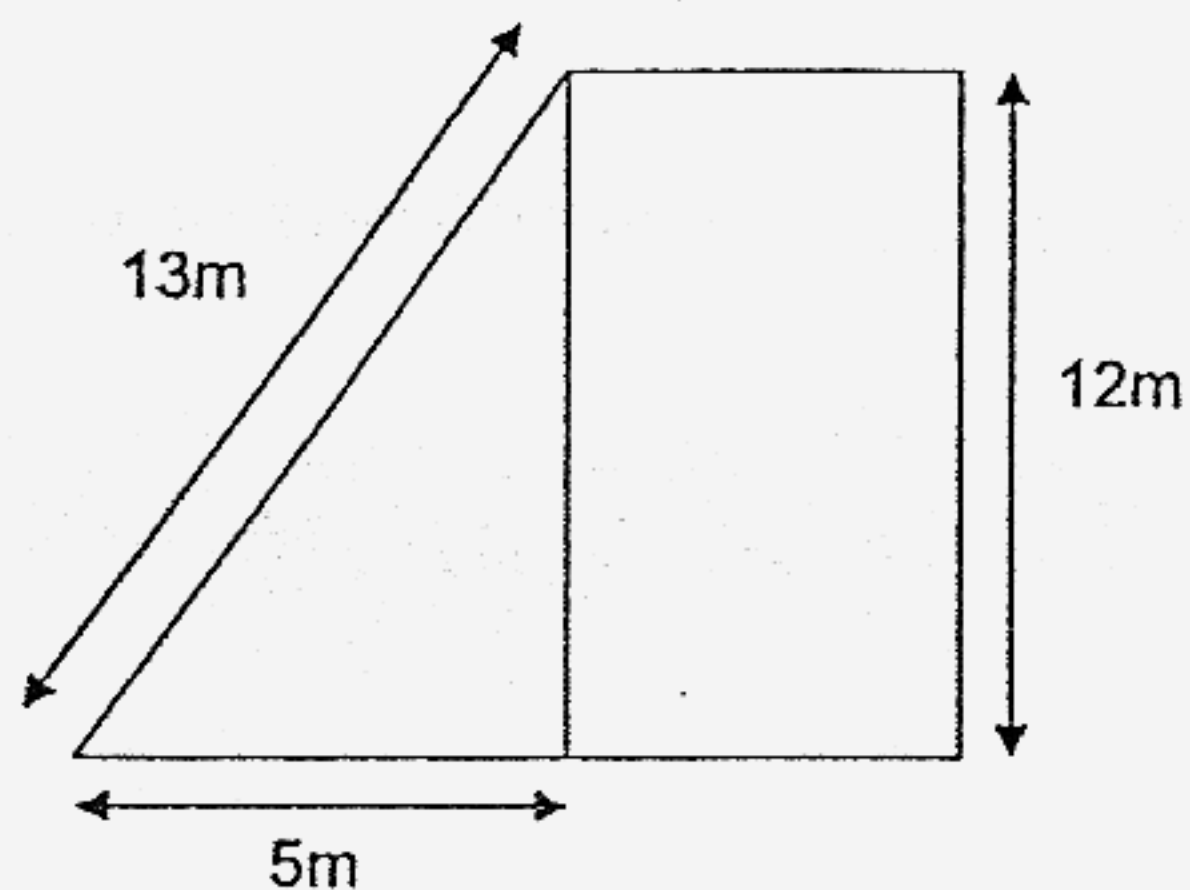
12) Joey and Clara shared \$320 in the ratio 1 : 4. How much did Clara receive?

- (1) \$64
- (2) \$80
- (3) \$240
- (4) \$256

13) For every 4 bars of chocolate sold, Jiamin receives \$4.80. How much will she receive if she sells 1 dozen of chocolates?

- (1) \$1.20
- (2) \$3.70
- (3) \$14.40
- (4) \$48.00

- 14) The figure, not drawn to scale, is made up of a right-angled triangle and a rectangle. If the area of the rectangle is 96m^2 , find the perimeter of the figure.



- (1) 30m
(2) 38m
(3) 46m
(4) 58m
- 15) A carpenter uses nails along the edges of a square board such that there are 25 nails on each side of the square. How many nails does the carpenter use altogether?
- (1) 94
(2) 96
(3) 98
(4) 100

SECTION B (30 marks)

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.

16) In 980541, the digit _____ is in the thousands place.

Ans: _____

17) The value of $100 - (67 - 57) \times 7$ is _____.

Ans: _____

18) Find the value of $0.05 + 0.008 + 0.4$

Ans: _____

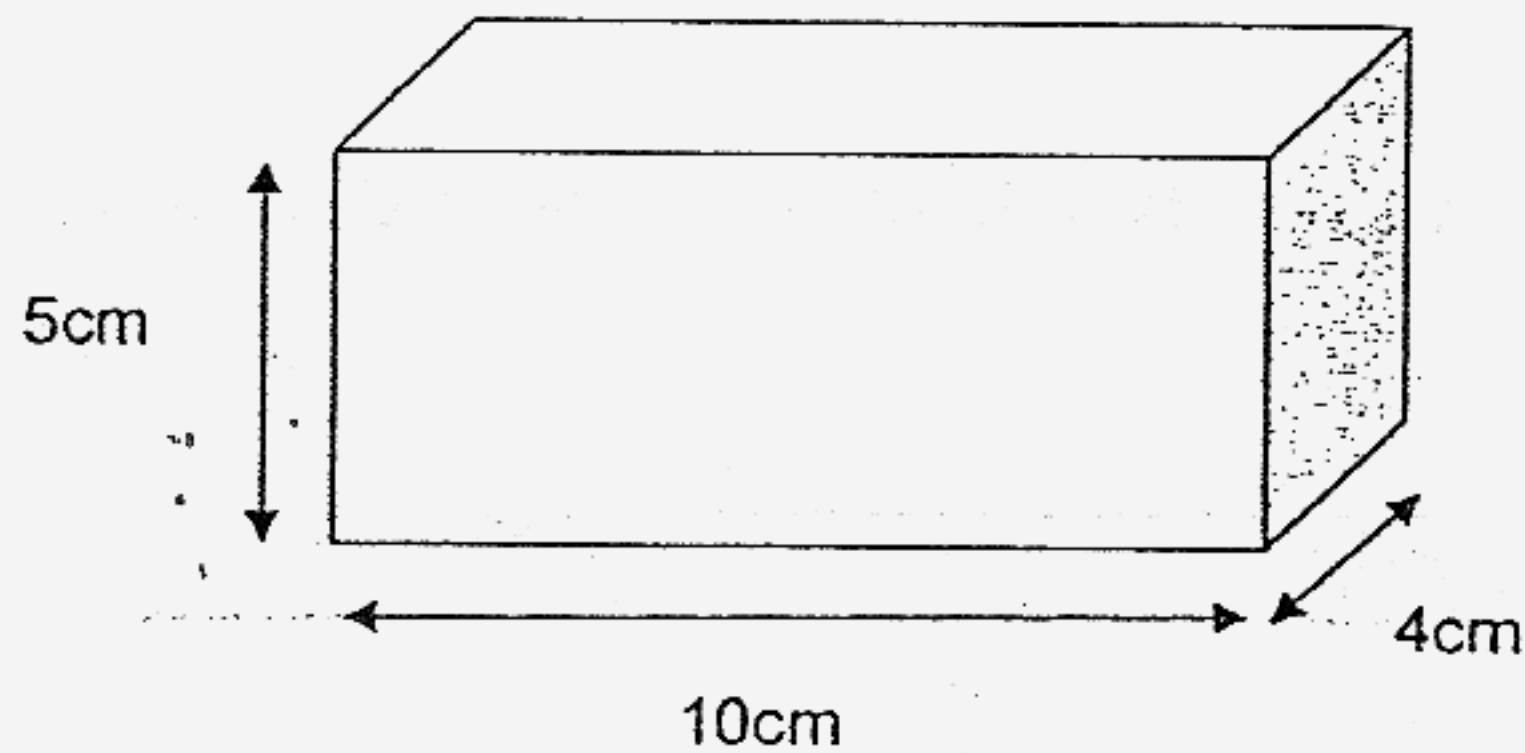
19) What is the value of $\frac{1}{2}$ of $\frac{4}{9}$?

Ans: _____

20) How many eighths are there in $1\frac{3}{4}$?

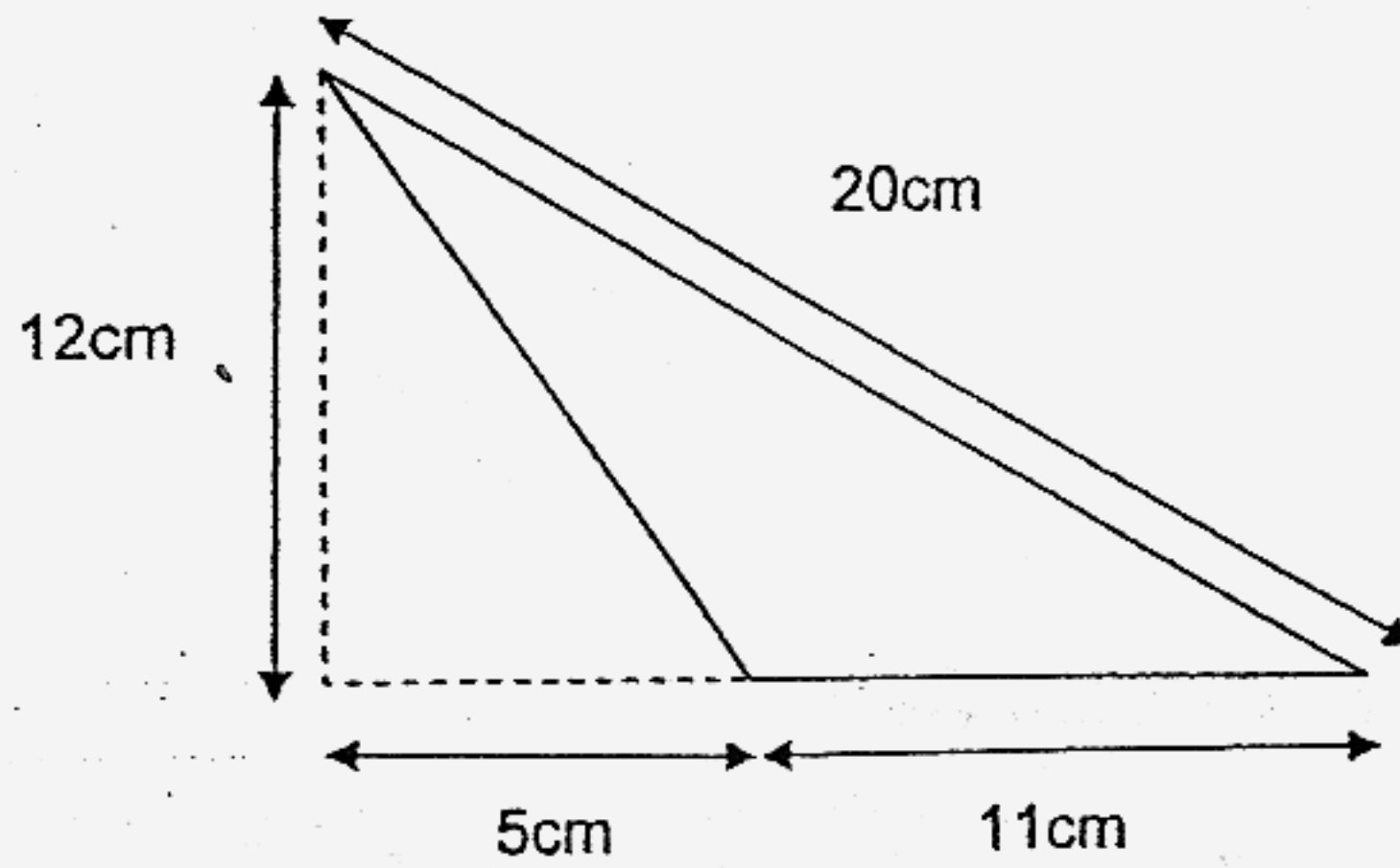
Ans: _____

21) What is the volume of the container below?



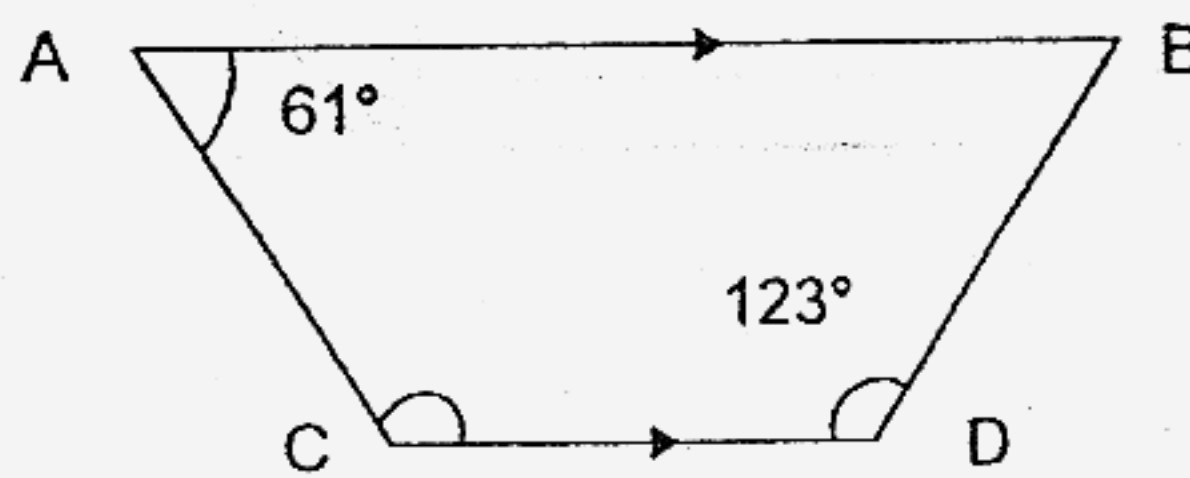
Ans: _____ cm^3

22) The figure below is not drawn to scale. The area of the triangle is _____.



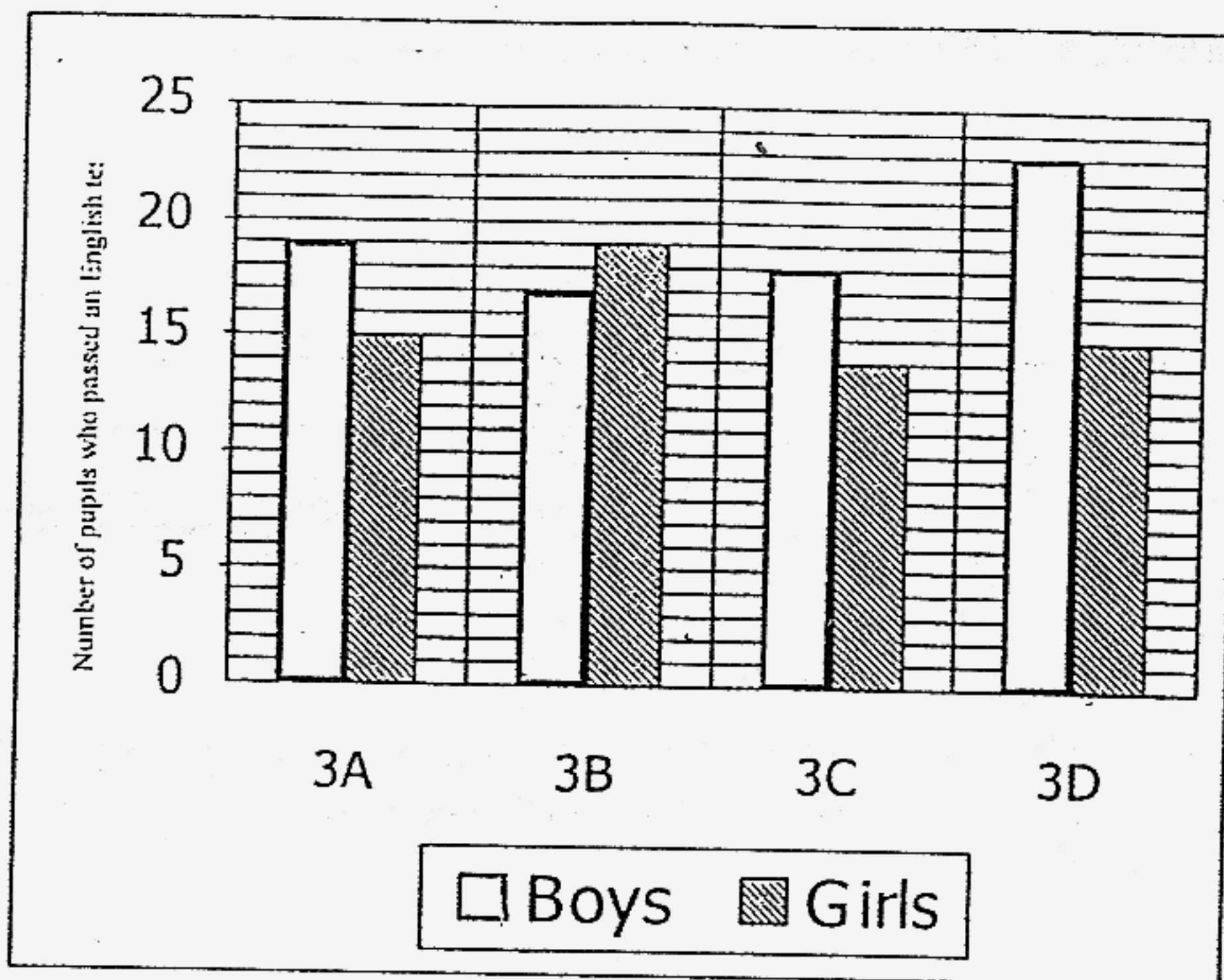
Ans: _____ cm²

23) The figure below is not drawn to scale. ABCD is a trapezium. Calculate $\angle ACD$.



Ans: _____°

The table below shows the number of pupils who passed an English test. Each of the classes has an enrolment of 40 pupils. Answer Questions 24 and 25.



24) How many girls passed the English test altogether?

Ans: _____

25) What is the ratio of the number of pupils who passed the English test in 3C to the number of pupils who failed the test in the same class? (Give your answer in the simplest form)

Ans: _____

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.

26) A worker is paid \$60 a day. How many days must he work to earn \$1680?

Ans: _____

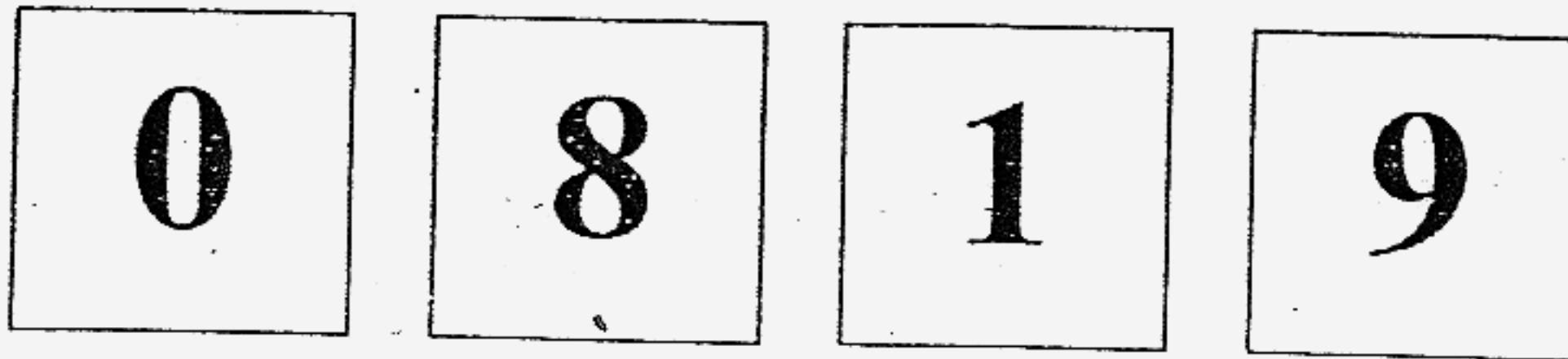
27) Samad bought 20 packets of sweets, each weighing 150g. Then, he repacked them into smaller packets, each weighing 25g. How many packets would he get?

Ans: _____

28) A pole is painted white, blue and red in the ratio 5 : 3 : 4. What fraction of the pole is painted red?

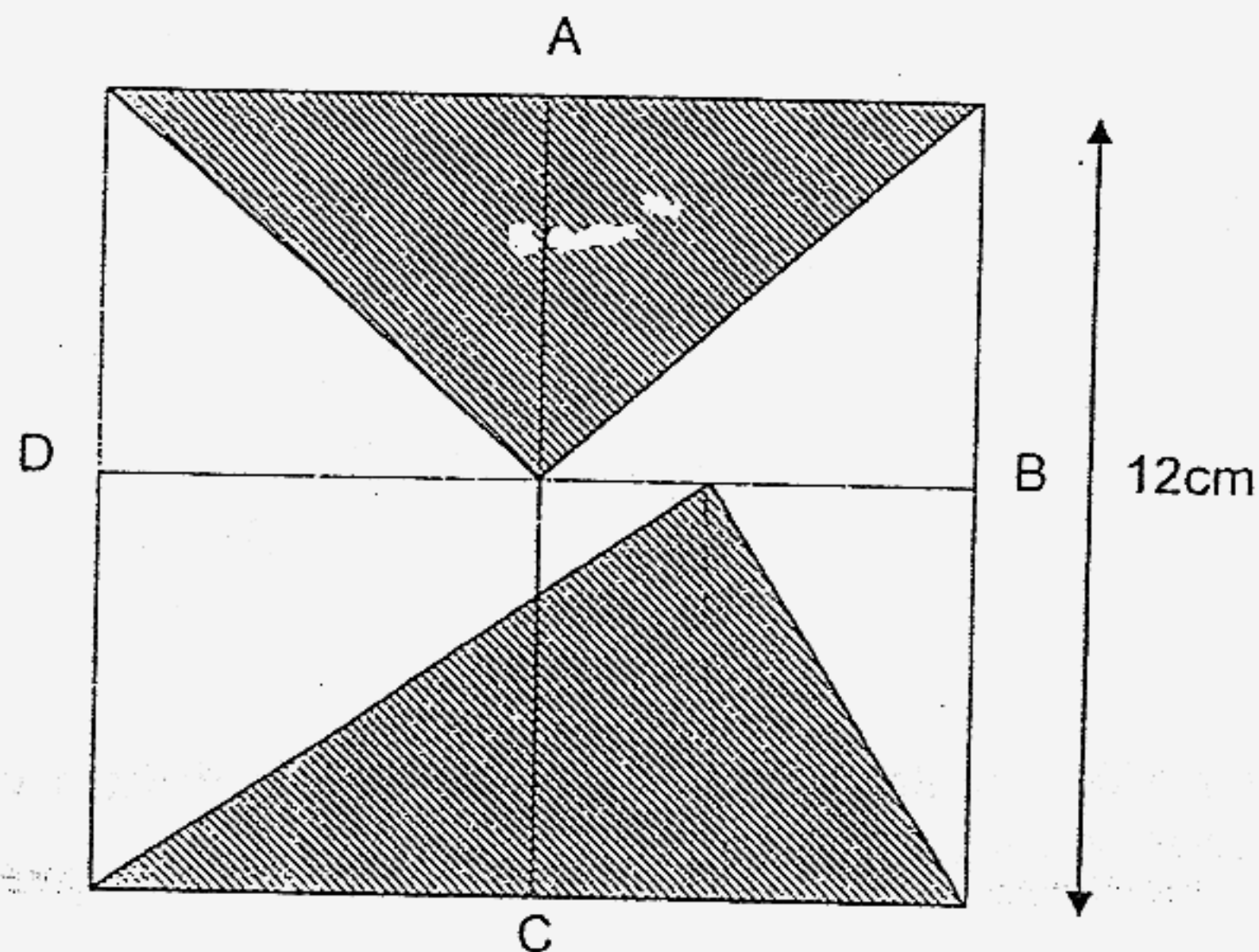
Ans: _____

29) Use any two digits to form the largest number which is a multiple of 9.



Ans: _____

30) The figure shows a square. A, B, C and D are mid-points on the 4 sides. Find the area of the unshaded part of the square.



Ans: _____ cm²

31) The time indicated on a clock is 11.00a.m. If the minute hand turns clockwise 180° , what time will it be?

Ans: _____

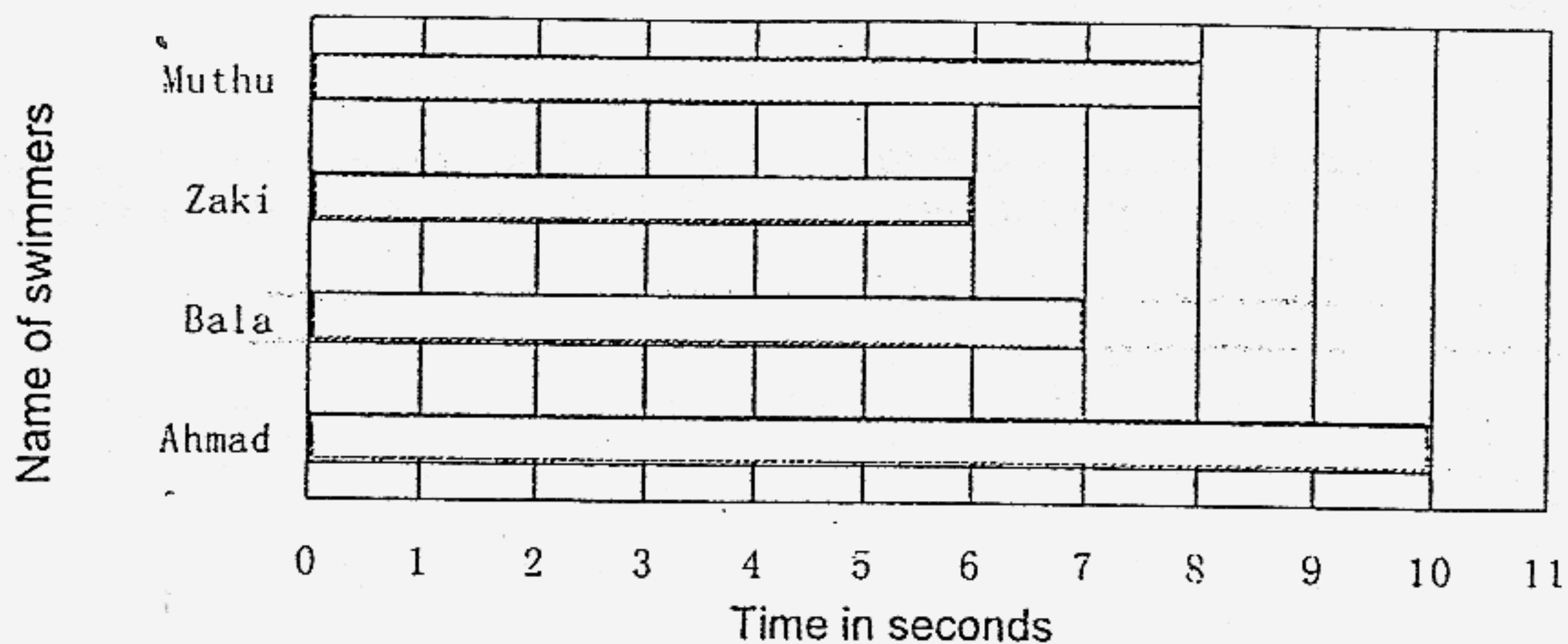
32) A rectangular living room, 12m by 9m, is laid with marble tiles at a cost of \$43 per m^2 . Find the cost of laying the whole floor with marble tiles.

Ans: \$ _____

33) There were 700 spectators in a stadium. 25% of them were adults. How many children were there?

Ans: _____

The chart below shows the time taken by 4 swimmers to complete a race. Study it carefully and answer Questions 34 and 35.



34) Who is the fastest swimmer for the race?

Ans: _____

35) How much faster is the fastest swimmer as compared to the swimmer who came in third?

Ans: _____ seconds

Class: Primary 5 ()

SECTION C (50 marks)

For questions 36 to 48, 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) Mary collected 75 sticks and Rose collected 43. After giving 22 sticks to their younger sister, they put the remainder ^{equally} into 4 boxes. How many sticks were there in each box?

Ans: _____ (3m)

37) If Elicia buys 2kg of squids, she will have \$28.90 left. If she buys 5kg of squids, she will have \$10.60 left. How much money does Elicia have?

Ans: _____ (3m) 3

38) A shopkeeper bought 280 apples. 28 of them were rotten. He then sold 63 of the good ones to Seng and the rest to Ming. What fraction of the good apples did Ming buy? (Give your answer in the simplest form)

Ans: _____ (3m)

39) An orange cost $\frac{1}{2}$ as much as a watermelon. Jiamin paid \$21 for 12 watermelons and 6 oranges. How much did she pay for the 6 oranges?

Ans: _____ (3m)

40) Joe had \$68 more than Mark. Bobbi had thrice as much as Mark. On the average, each person had \$56. How much money did Joe have?

Ans: _____ (3m)

41) Faridah, Iman and Erin shared some money in the ratio 8 : 5 : 3. Iman and Erin had a total of \$48. How much more money did Faridah have than Iman?

Ans: _____ (3m)

42) Alex has some red pens and blue pens in the ratio 7 : 3. He has 20 more red pens than blue pens. What is the new ratio of the number of red pens to the number of blue pens after he has given away 5 blue pens?

Ans: _____ (4m)

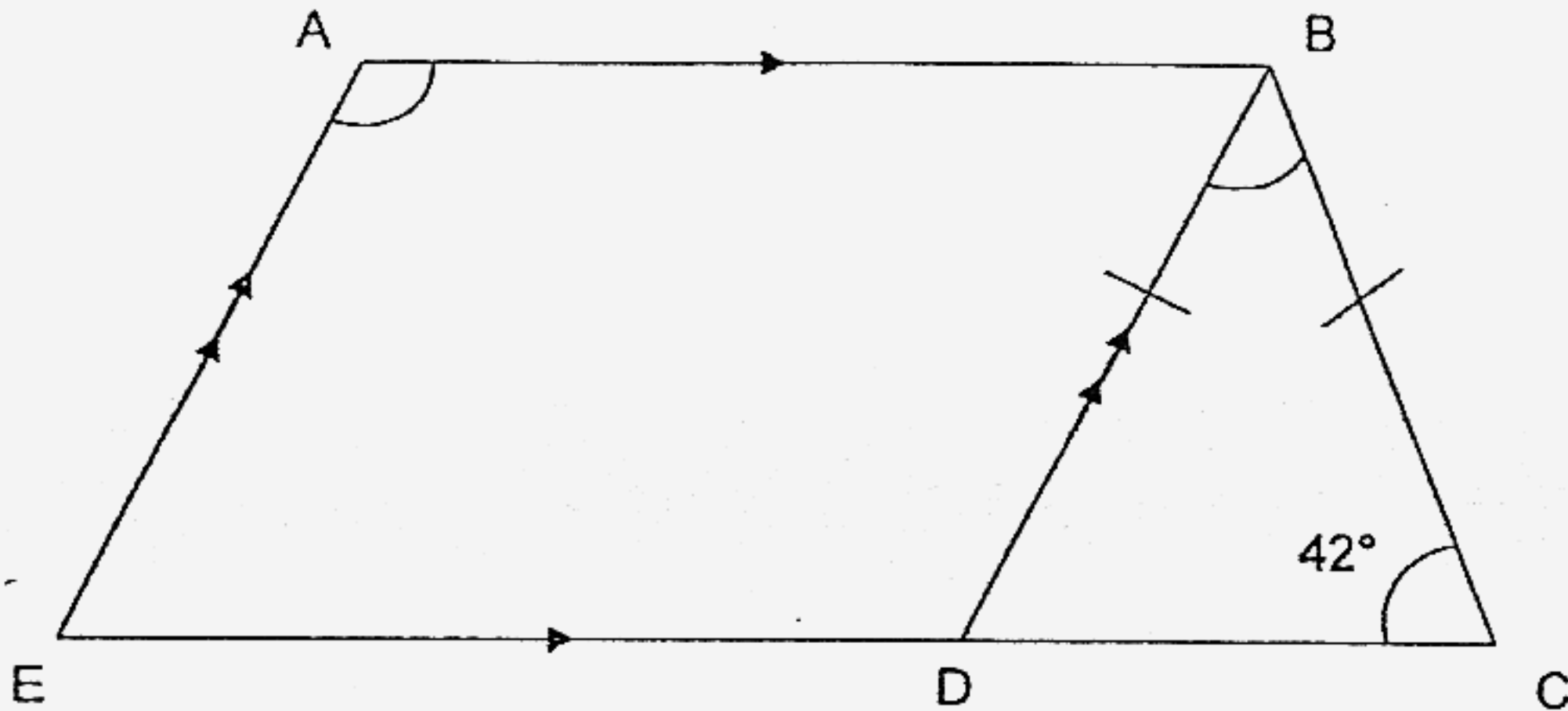
43) A container measuring 17cm by 8cm by 10cm was half filled with water. When 8 cubes were put in, the water level became 8cm. Find the volume of each cube.

Ans: _____ (4m)

44) ABDE is a parallelogram and BCD is an isosceles triangle. Calculate

- a) $\angle DBC$
- b) $\angle EAB$

The figure below is not drawn to scale.



Ans: a) _____ (2m)

b) _____ (2m)

45) A box containing 58 iron balls weighed 2145g. When 46 of the iron balls were removed, the mass of the box and the remaining iron balls weighed 489g. What was the mass of the box?

Ans: _____ (5m)

46) Cherie had 3 times as much money as Jolene. After Cherie spent \$40.00 and Jolene spent \$8.00, Jolene had 3 times as much money as Cherie. How much money did Cherie have at first?

Ans: _____ (5m)

47) Ricci saved \$200 from her salary and spent the rest. She spent $\frac{1}{9}$ of the expenditure on a blouse, \$40 on a scarf and the rest on books. The amount spent on the scarf was \$20 less than that spent on the blouse. What was her salary?

Ans: _____ (5m)

48) At an exhibition, 30% of those present were boys. $\frac{5}{14}$ of the remainder were girls and the rest were adults. There were 45 more adults than boys. How many more children than adults were there at the exhibition?

Ans: _____ (5m)

- End Of Paper -

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Tao Nan Primary School

Answer Sheets

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

16. 0

17. $100 - (67 - 57) \times 7$
 $= 100 - 70 = 30$

18. $0.400 + 0.050 + 0.008 = 0.458$

19. $\frac{1}{2} \times \frac{4}{9} = \frac{2}{9}$

20. $1\frac{3}{4} \times 8 = 14$

21. $10 \times 5 = 40 \times 5$
 $= 200\text{cm}^2$

22. $\frac{1}{2} \times 11 \times 12 = 66\text{cm}^2$

23. $180^\circ - 61^\circ = 119^\circ$

24. $15^\circ + 15^\circ + 19^\circ + 14^\circ = 63^\circ$

25. $18 + 14 = 32$
 $40 - 32 = 8$
 $32 : 8 = 4 : 1$

26. $\$1680 \div 60 = 28$

27. $150 \times 20 = 3000$
 $3000 \div 25 = 120$

28. $5 + 3 + 4 = 12$

29. 81

$$\frac{4}{12} = \frac{1}{3}$$

30. $\frac{1}{2} \times 12 \times 12 = 72\text{cm}^2$

31. 11.30am

32. $12 \times 9 = 108$
 $108 \times 43 = \$4644$

33. $100\% = 700$
 $75\% = 525$

34. Zaki

35. $8 - 6 = 2\text{secomds}$

$$\begin{aligned} 36. \quad 75 + 43 &= 118 \\ 118 - 22 &= 96 \\ 96 \div 4 &= 24 \end{aligned}$$

There were **24 sticks** in each box.

$$\begin{aligned} 37. \quad 5\text{kg} - 2\text{kg} &= 3\text{kg} \\ 3\text{kg} &= \$(28.90 - 10.60) \\ &= \#18.30 \\ 2\text{kg} &= \$12.20 \\ &= \$(12.20 + 28.90) \\ &= \$41.10 \end{aligned}$$

Elicia has **\\$41.10**

$$\begin{aligned} 38. \quad 280 - 28 &= 252 \\ 252 - 63 &= 189 \\ &= \frac{189}{252} \\ &= \frac{3}{4} \end{aligned}$$

$$\begin{aligned} 39. \quad 12 \times 2 &= 24 \\ 24 + 6 &= 30 \\ 30 &= 21 \\ 6 &= \$4.20 \end{aligned}$$

She paid **\\$4.10** for 6 oranges.

$$\begin{aligned} 40. \quad \$56 \times 3 &= \$168 \\ \$168 \div 2 &= \$84 \\ \$84 \div 2 &= \$42 \\ \$42 + \$46 &= \$88.00 \end{aligned}$$

Joe has **\\$88.00**

$$\begin{aligned}
 41. \quad 5 + 3 &= 8 \\
 8u &= \$48 \\
 3u &= \$18.00
 \end{aligned}$$

Faridah has \$18 more than Iman.

$$\begin{aligned}
 42. \quad 4u &= 20 \\
 7u &= 35 \\
 3u &= 5 \times 3 \\
 &= 15 \\
 &= 15 - 5 \\
 &= 10 \\
 35 : 10 &= 7 : 2
 \end{aligned}$$

The new ratio of the number of red pens to the number of blue pens is 7 : 2

$$\begin{aligned}
 43. \quad 10 \div 2 &= 5 \\
 8 - 5 &= 3 \\
 17 \times 8 \times 3 &= 408 \\
 &= 408 \div 8 \\
 &= 51\text{cm}^3
 \end{aligned}$$

The volume of the cubes is 51cm³

$$\begin{aligned}
 44a. \quad \angle DBC &= 180^\circ - (42^\circ + 2^\circ) \\
 &= 180^\circ - 84^\circ \\
 &= \underline{96^\circ}
 \end{aligned}$$

$$\begin{aligned}
 44b. \quad \angle DBA &= 42^\circ \text{ (alt } \sphericalangle \text{)} \\
 \angle EAB &= 180^\circ - 42^\circ \\
 &= \underline{138^\circ}
 \end{aligned}$$

$$\begin{aligned}
45. \quad 58 - 46 &= 12 \\
2145 - 489 &= 1656 \\
46u &= 1656 \\
12u &= 72 \times 6 \\
&= 432 \\
&= 489 - 432 \\
&= 57g
\end{aligned}$$

The mass of the box is 57g

$$\begin{aligned}
46. \quad 8u &= \$(40 - \$8 - \$8 - \$8) \\
&= \$16.00 \\
9u &= \$18.00 \\
&= \$(18 + 8 + 8 + 8) \\
&= \$42
\end{aligned}$$

Cherie has \$42.00 at first.

$$\begin{aligned}
47. \quad \text{Blouse} &= \$40 + \$20 \\
&= \$60 \\
1u &= \$60 \\
9u &= \$540 \\
&= \$(540 + 200) \\
&= \$740.00
\end{aligned}$$

Her salary was \$740.00

$$\begin{aligned}
48. \quad 14u &= 70\% \\
5u &= 25\% \\
9u &= 5 \times 9 \\
&= 45\% \\
45\% &= 3 \times 45 \\
&= 135 \\
&= 165 - 135 \\
&= 30 \\
(45 - 30)\% &= 15\% \\
15\% &= 45 \\
55\% &= 165 \\
&= 165 - 135 \\
&= 30
\end{aligned}$$

There 30 more children than adults at the exhibitions