

SAT

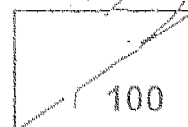
TAO NAN SCHOOL
PRIMARY SIX MATHEMATICS MID-YEAR EXAMINATION - 2004

NAME: _____ () DATE: 12 May 2004

CLASS: PRIMARY 6 _____ TIME: 7.50 a.m. - 10.05 a.m.

PARENT'S SIGNATURE: _____

MARKS:



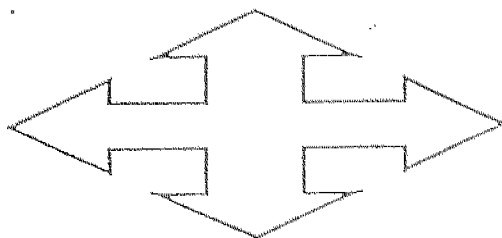
Section A (25 marks)

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). Shade the correct oval on the Optical Answer Sheet.

1. Which of the following numbers is the largest?

- 1) 0.7
- 2) 0.62
- 3) 0.098
- 4) 0.505

2.



How many lines of symmetry does the above figure have?

- 1) 1
- 2) 2
- 3) 3
- 4) 4

3. What is the value of $8 + 32 \div 2 \times 4$?

- 1) 5
- 2) 12
- 3) 72
- 4) 80

4. Express 11% as a decimal.

- 1) 0.011
- 2) 0.11
- 3) 1.10
- 4) 11.0

5. If $\frac{9}{6} = 3 : \square$, the missing number in the box is _____.

- 1) 1
- 2) 2
- 3) 3
- 4) 6

6. Complete the following number pattern.

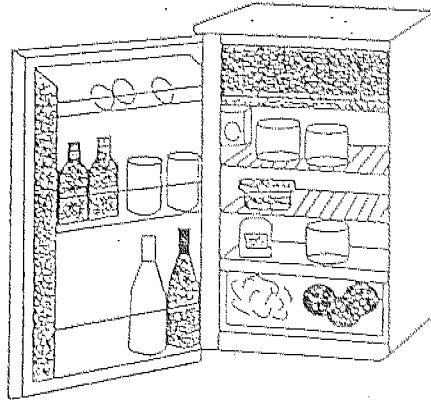
$0.5, \frac{1}{3}, 0.25, \underline{\hspace{2cm}}, \frac{1}{6}$

- 1) 0
- 2) 0.125
- 3) 0.2
- 4) 0.5

7. A tailor used 4 m of cloth to make a dress.
What is the maximum number of dresses that he can make from 21 m of cloth?

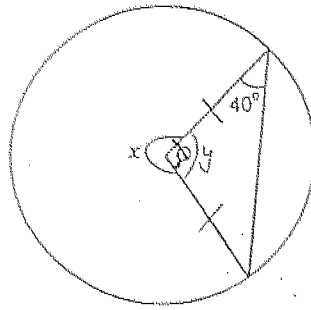
- 1) 5
- 2) 6
- 3) 3
- 4) 4

8. Which of the following cannot be the internal dimensions of this 120-litre refrigerator?



- | | Length | Width | Height |
|----|--------|-------|--------|
| 1) | 40 cm | 25 cm | 120 cm |
| 2) | 40 cm | 30 cm | 100 cm |
| 3) | 50 cm | 30 cm | 80 cm |
| 4) | 60 cm | 30 cm | 100 cm |

9.



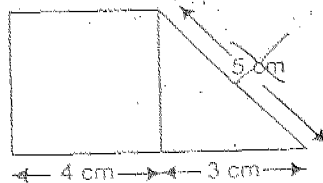
In the figure above, not drawn to scale, O is the centre of the circle.
Find $\angle x$.

- 1) 140°
- 2) 260°
- 3) 270°
- 4) 320°

10. A train travels at 25 m per second.
How many kilometres does it travel in 50 minutes?

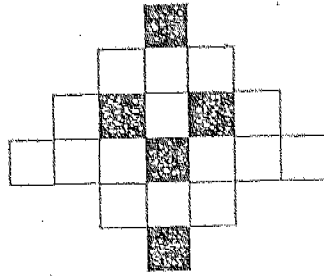
- 1) ~~0.5~~
- 2) ~~1.25~~
- 3) 75
- 4) 1250

11. Find the (ratio) of the area of the square to the area of the triangle.

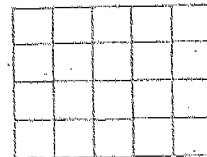
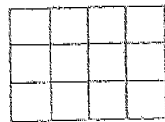


- 1) 4 : 3
- 2) 3 : 8
- 3) 8 : 3
- 4) 32 : 15

12. How many more squares in the figure below must be shaded so that only 30% of the figure is left unshaded ?



- 1) 1
 2) 2
 3) 6
 4) 9
13. The figures are made up of identical squares.
 Find the number of such squares for the 10th figure.



?

Figure 1

Figure 2

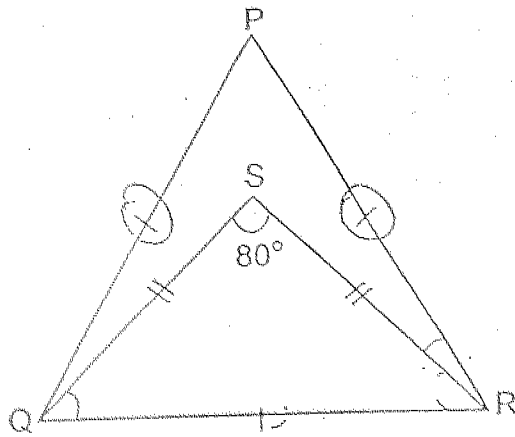
Figure 3

...

Figure 10

- 1) 90
 2) 100
 3) 132
 4) 144

14. In the figure below, $\angle QSR = 80^\circ$.
Find $\angle PRS$.



- 1) 10°
 - 2) 15°
 - 3) 20°
 - 4) 50°
15. Rena was saving some money to buy a handphone.
In the first month, her savings were \$30 less than half the price of the handphone.
She saved \$150 in the second month and had just enough money to buy the
handphone.
How much was the handphone?

- 1) \$120
- 2) \$150
- 3) \$240
- 4) \$270

NAME: _____ ()

CLASS: P6 _____

SECTION B (20 marks)

Questions 16 to 35 carry 1 mark each. Write your answers in the spaces provided. Give your answers in the units stated.

16. Write in numerals :
Twenty-five thousand and thirty.

Answer: _____

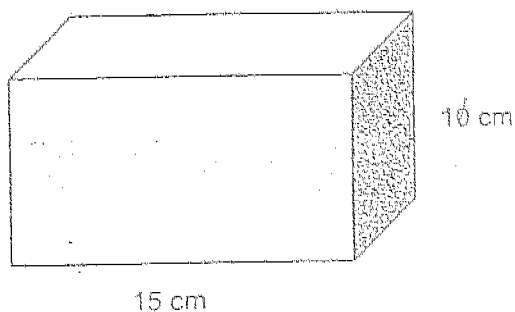
17. Find the sum of 31, 2.7, 5.02.

Answer: _____

18. Express 13kg 13g in kilograms.

Answer: _____ kg

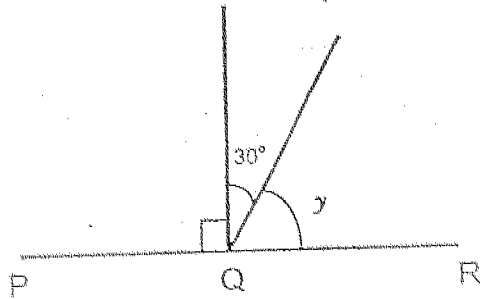
19.



The above cuboid, not drawn to scale, has a volume of 1200 cm^3 .
What is the area of the shaded part?

Answer: _____ cm^2

20. In the figure below, PQR is a straight line. Find $\angle y$.



Answer: _____

21.



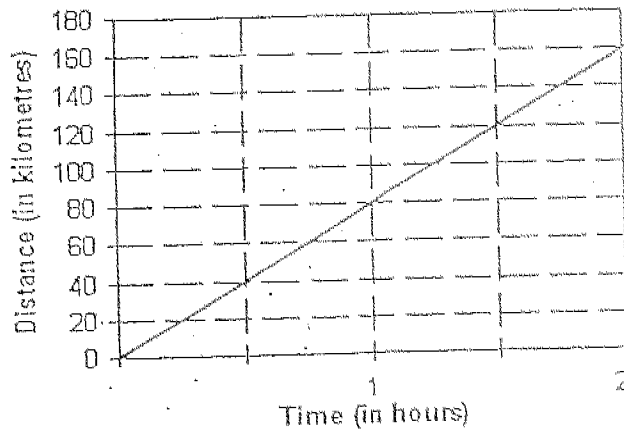
The above solid has _____ faces.

Answer: _____

22. Express $\frac{14}{25}$ as a percentage.

Answer: _____ %

The graph below shows the distance covered by a truck in 2 hours.
Use it to answer Questions 23 and 24.



23. What was the average speed of the truck?

Answer: _____ km/h

24. At this speed, how far would the truck travel in 3h 45 min?

Answer: _____ km

25. What is the missing number in the box ?

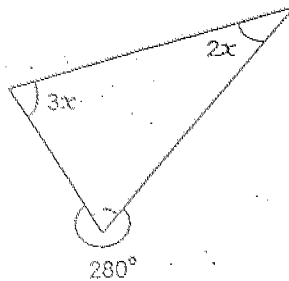
$$582\,347 = 5 \times 100\,000 + 80 \times \boxed{} + 2 \times 1000 + 3 \times 100 + 4 \times 10 + 1 \times 7$$

Answer: _____

26. $\frac{2}{3}$ of a number is 32.
Find the number.

Answer: _____

27.



In the figure above, not drawn to scale, find the value of x .

Answer: _____

28. How many cubes of sides 2 cm are needed to build a cuboid measuring 10 cm by 20 cm by 40 cm?

Answer: _____

29.

8, 9, 12, 15

The average of the 4 numbers above is 11.

Which number should be removed to obtain an average of 12 for the remaining numbers?

Answer: _____

30. If 40 cm^3 of a solid weighs 200 g, find the weight of 60 cm^3 of the solid.

Answer: _____ g

31. When each side of a 20-cm square is increased by 20%, the area becomes _____ cm^2 .

Answer: _____ cm^2

32. If $n = 4$, what is the value of $3n + 5$?

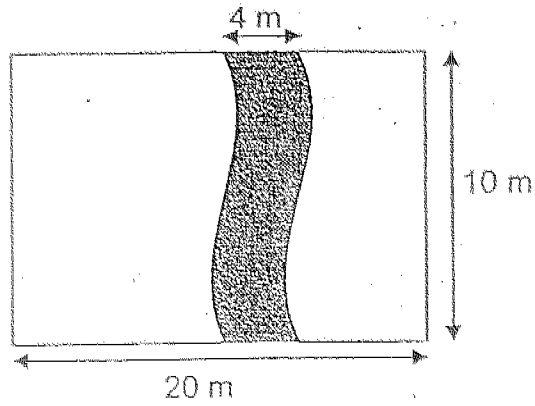
Answer: _____

33. The last digit of the sum of 7 to 26 is _____

7, 8, 9, 10, ..., 24, 25, 26

Answer: _____

34.



The figure shows a rectangular field, 20 m by 10 m.
It has a path, 4 m wide, running through it.
Find the area of the path.

Answer: _____ m^2

35. The ratio of Dilly's age to Taffy's age is 4:3.
Dilly is 28 years old now.
In how many years' time will their combined age be 57?

NAME: _____ () CLASS: P6 _____

Section C (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 brackets [] at the end of each question or part-question.

36. Megan jogs at an average speed of 120 m/min.
How long will she take to complete 2.4 km?

Answer: _____ [2m]

37. If a Gameboy cartridge costs \$68, what is the maximum number of such cartridges you can buy with \$2420?

Answer: _____ [2m]

38. Jenny weighs c kg.
Her mother is 3 times as heavy as she is.
What is their average weight?

Answer: _____ [2m]

39. Regan has thrice as many stamps as Harry.
The total number of Regan's and Harry's stamps is twice that of Andrew's.
The three of them have a total of 210 stamps.
How many more stamps does Regan have than Harry?

Answer: _____ [3m]

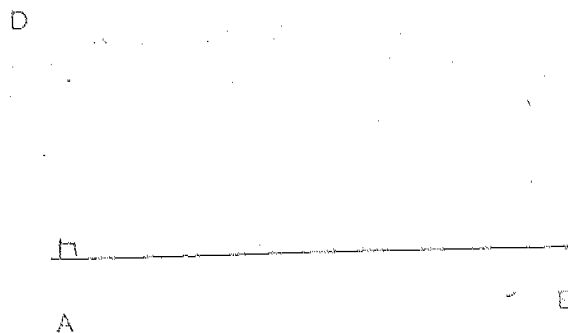
40. The table below shows the favourite sports of 400 pupils.

Activity	Percentage
Soccer	25%
Badminton	20%
Netball	?
Swimming	40%

- a) What ^{base}percentage of the pupils chose netball as their favourite sport?
 b) How many more pupils preferred swimming to soccer?

Answers:
 a) _____ [1m]
 b) _____ [2m]

41. a) Complete the figure below by drawing a line CD, 6 cm long, such that CD is parallel to AB. Join CB. [2m]
 b) Measure and write down the size of $\angle CBA$.



Answer: b) _____ [1m]

42. Tina and Raine had some money in the ratio 2 : 7.
The ratio of Tina's spending to Raine's spending is 2:9 .
Tina used $\frac{1}{2}$ of her money.
Raine had \$150 left.
How much money did each of them have at first?

Answers: Tina : _____ [2m]

Raine : _____ [2m]

43. There are 24 children.
The ratio of the number of boys to the number of girls is 3 : 5.
Each girl's monthly allowance is $\frac{5}{7}$ of the boy's.
If a boy's monthly allowance is (\$84), find the total monthly allowance of all the girls.

Answer: _____ [4m]

44. Gina can paint a banner in 3 hours.
Faizal can paint the same banner in 2 hours.
If they work together,

- a) how much of the banner will be completed in 1 hour?
- b) how long will they take to paint the banner?

Answers: a) _____ [2m]

b) _____ [2m]

45. Josh had a rectangular garden measuring 30 m by 12 m. The contractor started turfing the garden at \$7 per m^2 at first. A week later, he lowered the turfing cost to \$5 per m^2 . Josh paid a total of \$2 260 to the contractor for turfing the whole garden. What is the area of the garden which was turfing at \$5 per m^2 ?

Answer: _____ [4m]

46. In a competition, there are 360 more boys than girls.
The number of girls is 35% of the total number of children.
How many children are there?

Answer : _____ [4m]

47. 12 000 people attended a book fair.

$\frac{3}{5}$ of them were adults.

The number of male adults who visited the fair was $\frac{3}{4}$ of the number of children.

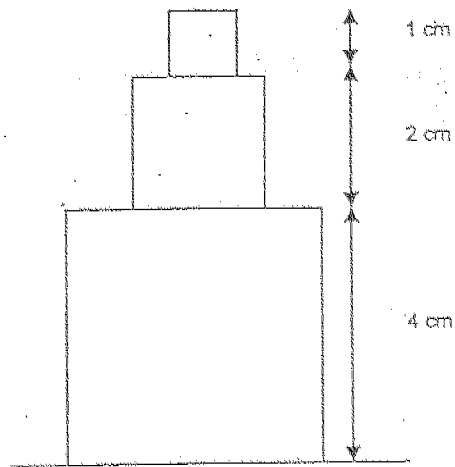
- a) How many female adults visited the book fair?
- b) If the admission fees for the fair were \$5 per adult and \$3 per child, how much money was collected in all?

a) _____ [3m]

Answers:

b) _____ [2m]

48. The figure shows the front view of an exhibit which is fixed to the ground. It consists of 3 solid cubes with dimensions as shown below. Find the exposed surface area of the figure.



Answer: _____ [5m]

49. Jane and Peter started cycling from Point A on a road but in the opposite direction. After 2 hours, they were 38 km apart. Jane's average cycling speed was 5 km/h slower than Peter's. What was Peter's average cycling speed?

Answer: _____ [5m]

50. Mr Tan spent \$1972 on Beyblades and Barbie dolls.
He bought 3 times as many Beyblades as Barbie dolls.
Each doll cost \$10 more than each Beyblade.
Mr Tan paid \$476 more for the Beyblades than the dolls.
Find the cost of a Barbie doll.

~ END OF PAPER ~
Have You Checked Your Work?

TAO NAN SCHOOL
PRIMARY SIX
MATHEMATICS
MID YEAR EXAMINATION 2004

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- | | | |
|----------------|------------------------------|------------------------|
| 1) 1 | 28) 1000 | 48) 100 cm^2 |
| 2) 2 | 29) 8 | 49) 12 km/h |
| 3) 3 | 30) 300 | 50) \$ 22.00 |
| 4) 2 | 31) 576 | |
| 5) 2 | 32) 17 | |
| 6) 3 | 33) 0 | |
| 7) 1 | 34) 40 | |
| 8) 4 | 35) 4 | |
| 9) 2 | 36) 20 min | |
| 10) 3 | 37) 35 | |
| 11) 3 | 38) 2c kg | |
| 12) 4 | 39) 70 | |
| 13) 3 | 40) a) 15% | |
| 14) 1 | b) 60 | |
| 15) 3 | 41) 78° | |
| 16) 25030 | 42) \$ 120 | |
| 17) 38.72 | \$ 420 | |
| 18) 13 13/1000 | 43) \$ 900 | |
| 19) 80 | 44) a) $5/6$ | |
| 20) 60 | b) $1 \frac{1}{5} \text{ h}$ | |
| 21) 3 | 45) 130 m^2 | |
| 22) 56 | 46) 1200 | |
| 23) 80 | 47) a) 3600 | |
| 24) 300 | b) \$ 50400 | |
| 25) 1000 | | |
| 26) 48 | | |
| 27) 20 | | |