RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT (1)

2005   SA1

	Your Score out of **100** marks		
		Class	**Level**
Highest score			
Average score			
Parent's Signature			

Name: _____ Class: **P6** __ Index No: ____

10 MAY 2005   MATHEMATICS   ATT: 2 h 15 min

<u>Booklet A (25 marks)</u>
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) and shade the correct oval on the Optical Answer Sheet.

1.   In 312 075, the digit '0' is in the _____ place.

    (1)   ones
    (2)   tens
    (3)   hundreds
    (4)   thousands

2.   How many quarters are there in $1\frac{12}{16}$?

    (1)   12
    (2)   28
    (3)   3
    (4)   7

3. Mary has 2 kg of rice in a sack. She wants to put them all into bags of 150g. How many bags will she need for this?

    (1) 12

    (2) 13

    (3) 14

    (4) 15

4. Mr. Lim travelled 44 km driving at a speed of 66 km/h. How long did he take to complete his journey?

    (1)   40 min

    (2)   45 min

    (3)   90 min

    (4)   150 min

5. If Faith's savings is $\frac{4}{5}$ of Geraldine's savings, what is the ratio of Faith's saving to their total savings?

    (1) 4 : 5

    (2) 4 : 9

    (3) 5 : 4

    (4) 5 : 9

6. $1\frac{4}{10} = \frac{2}{5} \times 2 + \frac{\square}{10}$ What is the missing number?

    (1)   6

    (2) 10

    (3)   3

    (4) 12

7. $1 + \dfrac{1}{10} + \dfrac{3}{1000}$ has the same value as _____.

(1) 1. 013

(2) 1. 103

(3) 1. 130

(4) 1. 301

8. At a market, three apples were sold for $p. How much did Amy pay for 12 apples?

(1) $4p

(2) $12 p

(3) $(p+ 4)

(4) $(3p+4)

9. The length of a rope is $1\frac{1}{2}$ times that of the length of a ribbon.

What is the ratio of the length of the rope to that of the ribbon?

(1) 1 : 2

(2) 2 : 1

(3) 2 : 3

(4) 3 : 2

10. Tim bought 20 marbles. 12 of them were red while the rest were blue.
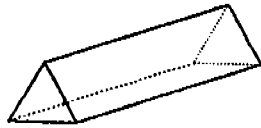
What percentage of the marbles were blue?

(1) 20 %

(2) 40%

(3) 60%

(4) $66\frac{2}{3}$ %

11. What is the least number of pencils that I should buy so that they can shared equally among 4 or 6 pupils without any remainder?

    (1)   6

    (2)   2

    (3) 12

    (4)   4

12. What is 25 thousandths less than $\frac{2}{25}$?
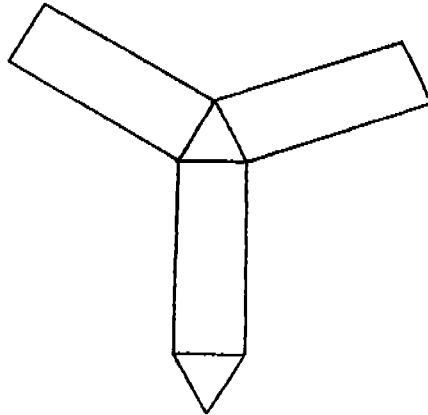
    (1)   0.017

    (2)   0.025

    (3)   0.055

    (4)   0.105

13. The figure below shows a solid.
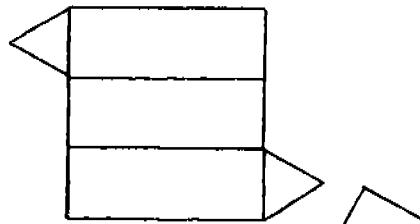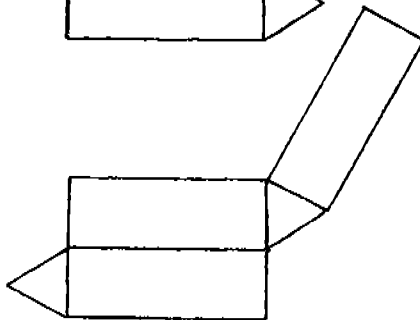

Which of the following is <u>not</u> a net of the solid?
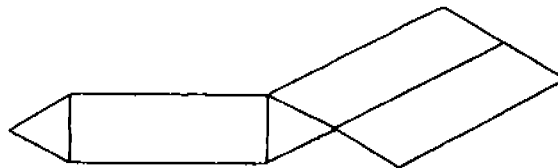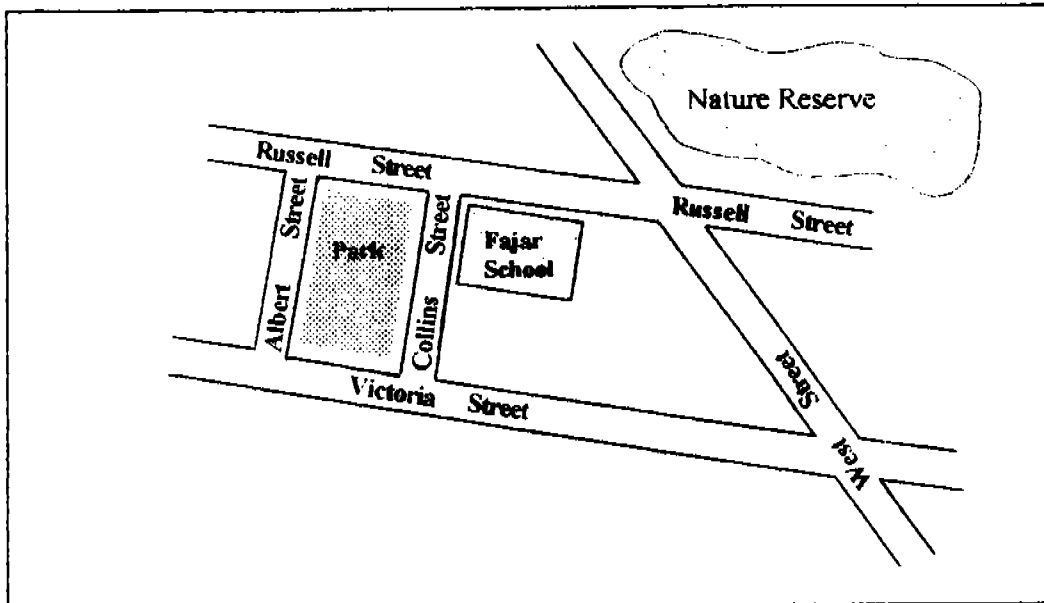
✓ (1)

✓ (2)

(3)

✓ (4)

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This is a page from a street directory.

Use the information to answer Question 14.

14. Which two streets are perpendicular lines to each other?

    (1) Russell Street and Victoria Street

    (2) Russell Street and Collins Street

    (3) Albert Street and Collins Street

    (4) Victoria Street and West Street

15. Ahmad took 6 minutes to type a 600-word assignment. How long did he take to type 960 words?

    (1) 1 min

    (2) 1 min 36 sec

    (3) 3 min 45 sec

    (4) 9 min 36 sec

NAME : _____   DATE : _____

CLASS : _____

WRITE	SHADE OVALS
INDEX NUMBER	④ ⑤ ⑥ ⑦ ⑧ ⑨
	⑤ ⑥ ⑦ ⑧ ⑨
	⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
	⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
	⓪ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
	Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ Ⓖ Ⓗ Ⓘ Ⓙ Ⓩ

SUBJECT :

EXAMPLE: IF YOU THINK THE 2ND OPTION IS THE CORRECT ANSWER SHADE THE OVAL ② LIKE THIS :

① ⬤ ③ ④

1 ① ② ⬤ ④   21 ① ② ③ ④   41 ① ② ③ ④
2 ① ② ③ ⬤   22 ① ② ③ ④   42 ① ② ③ ④
3 ① ② ⬤ ④   23 ① ② ③ ④   43 ① ② ③ ④
4 ⬤ ② ③ ④   24 ① ② ③ ④   44 ① ② ③ ④
5 ① ⬤ ③ ④   25 ① ② ③ ④   45 ① ② ③ ④

6 ⬤ ② ③ ④   26 ① ② ③ ④   46 ① ② ③ ④
7 ① ⬤ ③ ④   27 ① ② ③ ④   47 ① ② ③ ④
8 ⬤ ② ③ ④   28 ① ② ③ ④   48 ① ② ③ ④
9 ① ② ③ ⬤   29 ① ② ③ ④   49 ① ② ③ ④
10 ① ⬤ ③ ④   30 ① ② ③ ④   50 ① ② ③ ④

11 ① ② ⬤ ④   31 ① ② ③ ④   51 ① ② ③ ④
12 ① ② ⬤ ④   32 ① ② ③ ④   52 ① ② ③ ④
13 ① ② ⬤ ⬤   33 ① ② ③ ④   53 ① ② ③ ④
14 ① ⬤ ③ ④   34 ① ② ③ ④   54 ① ② ③ ④
15 ① ② ③ ⬤   35 ① ② ③ ④   55 ① ② ③ ④

16 ① ② ③ ④   36 ① ② ③ ④   56 ① ② ③ ④
17 ① ② ③ ④   37 ① ② ③ ④   57 ① ② ③ ④
18 ① ② ③ ④   38 ① ② ③ ④   58 ① ② ③ ④
19 ① ② ③ ④   39 ① ② ③ ④   59 ① ② ③ ④

Booklet B (20 marks)
Questions 16 to 25 carry 1 mark each.
Write your answer in the space provided.
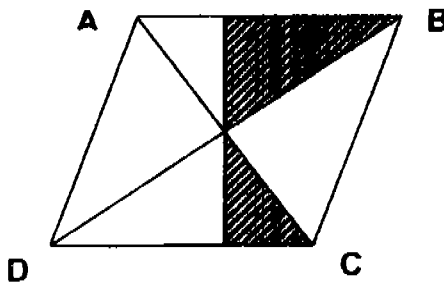Give your answer in the units provided.

16.   Subtract 399 from 199 200.

Answer: _____

17.   Find the value of 121 + 9 x 8 - 64 ÷ 4

Answer: _____

18.   The diagram below is not drawn to scale. ABCD is a rhombus.
        What fraction of the figure is shaded?
        Express your answer in its simplest form.

Answer: _____

19. Solve the following sum and give your answer in its simplest form.

$$\frac{4}{15} + \frac{3}{5} - \frac{1}{3}$$

Answer: _____

20. Arrange the following numbers from the smallest to the largest:

9.8,   9,   9.08

Answer: __ . _____
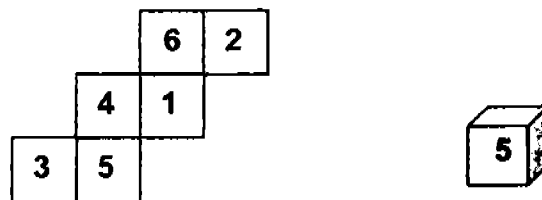
21. In every litre of pineapple drink, there is 400 ml of pineapple syrup. The rest of the drink is made up of water. How much water will there be in 2.5 litres of pineapple drink?

Answer: _____ ml

22. The figure below shows the net of a solid.

	6	2
	4	1
3	5	

What is the number on the face opposite to '5' on the solid?

Answer: _____

23. Zoey had $20. She spent $3y on transport and $6 on food.
How much had she left?

Answer: $ _____ . _____

24. How long will it take the minute hand of a clock to make 3 complete rounds on the face of the clock?

Answer: _____ minutes

25. Tom has 4 times as much money as Ali. Express the ratio of Tom's amount of money to that of Ali's.

Answer: _____

26. 30% of a number is 210. What is the number?

Answer: _____

27. Multiply 4 556 by 100. Then, subtract 2 tens from the answer.
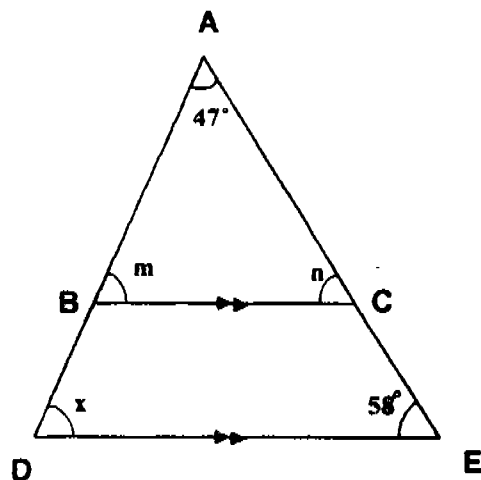
Answer: _____

28. Find the value of $\dfrac{9}{11} \div 3$

Answer: _____

29. Solve $\quad 16 - 2.7 \times 3 + 0.02$

Answer: _____

30. The figure below is not drawn to scale. ABD and ACE are straight lines. BC is parallel to DE. What is the sum of $\angle m$ and $\angle n$?

Answer: _____

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31. John was facing north-west. He made one anti-clockwise turn to face south. What angle had John turned through?

Answer: _____

32. Felicia used *m* oranges to make 3 cups of juice. How many oranges did she she use to make 7 cups of juice ?

Answer: _____ oranges

33. The parking rates at a car park are as follows:

Parking Rates	
lst hour or part thereof	$2.00
Subsequent hour or part thereof	$1.00

A driver had to pay $4.00 for parking his car at the car park. What was the longest duration that he could have parked?

Answer: _____ hours

34. In a school, the ratio of the number girls to the number of boys who exercised regularly was 3 : 5. If there were 180 more boys than girls who exercised regularly, find the number of girls who exercised regularly?

Answer: _____ girls

35. A worker painted 2m 25cm of a 6-metre fence railing.

What percentage of the railing was not painted?

Answer: _____ %

Booklet B (55 marks)
For questions 36 to 55, show your working clearly in the space below each question and write your answers on the line provided.
The number of marks available is shown in the brackets [ ] at the end of each question or part question.

36. Mrs. Tay baked 600 muffins to sell at a fun fair but only $\frac{4}{5}$ of them could be sold. She kept $\frac{1}{3}$ of what was left for herself. How many muffins did she keep for herself?

Answer: _____ [2m]

37. The average weight of 3 girls, Alice, Bernice and Cindy is 3w kg. Alice weighs 2w kg and Bernice weighs 36 kg. What is the weight of Cindy?

Answer: _____ [2m]

38.   Find 10 + (250 + 150) ÷ 100 x (100 – 100) + 999

Answer: _____ [3m]

39.   A watch cost $350 after a 20% discount. Joan had to pay 5 % GST on the amount. How much did Joan pay for the watch?
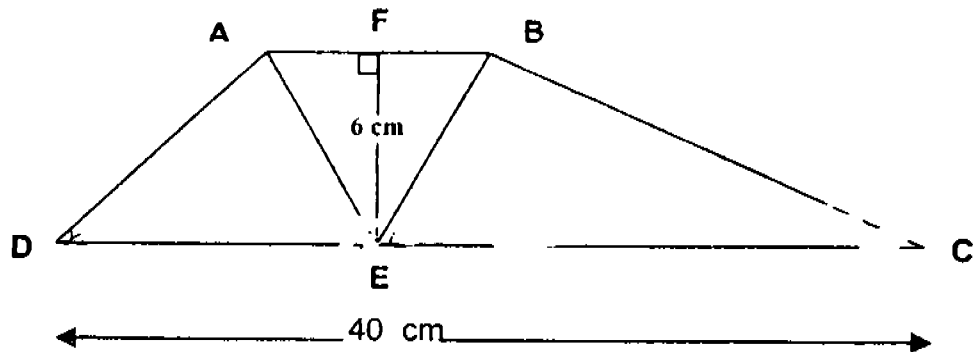
Answer: _____ [3m]

40. A square garden has a perimeter of 480 m. John planted a tree at each of the corners of the garden. He also planted the trees 10 m apart along the two opposite sides of the garden. How many trees did John plant altogether?

Answer: _____ [3m]

41. The ratio of the number of teachers to the number of pupils in the hall at first was 3 : 8. After 12 pupils had left the hall, the ratio of the number of teachers to the number of pupils became 2 : 5. Find the total number of people in the hall at first.

Answer: _____ _____ _____ [3m]

42. In the trapezium ABCD below, not drawn to scale, the ratio of the AF to FB is 1 : 1 while the ratio of DE to EC is 3 : 5. DE is three times as long as AF, DC = 40cm and FE = 6 cm. What is the ratio of the area of △AFE to the area of △BCE?

F is between A and B. D, E, C on bottom.

A   F   B

6 cm

D   E   C

40 cm

Answer: _____ [3m]

Serene has $280 more than Rachael. If Serene gives $60 to Rachael, Serene will have three times as much as Rachael. How much does Serene have at first?

Answer: ____ _____ [4m]

44. A box containing 3 files weighs 10.2 kg. Later, John added 2 more files and 3 books into the box and the weight of the box and its contents became 19 kg. If the weight of one file is four times the weight of the book,

(a) find the weight of the box. Express your answer as a decimal.

(b) John can only lift a maximum weight of 13 kg. What is the least number of files that he can remove from the box so that he is able to lift it?
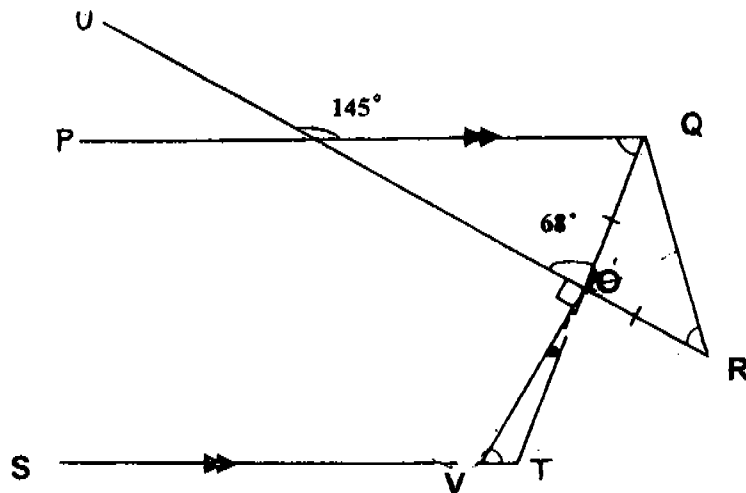
Answer: (a) _____ _____ [2m]

(b) _____ [2m]

For questions 45 to 50, show your working clearly in the space below each question and write your answers on the line provided.
The number of marks available is shown in the brackets [ ] at the end of each question or part question.

45. The figure below is not drawn to scale. PQ // ST and QOR is an isosceles triangle with QO = OR. UOR, QOT and SVT are straight lines.

(a) Find ∠QRO
(b) Find ∠TOV
(c) Find ∠OVS

Answer: (a) _____ [1m]

(b) __ _____ [1m]

(c) _____ [2m]

46. In an enrichment course, 60% of the members were girls and the rest were boys. When new members joined the course in the second semester, the number of girls increased by 40% while the number of boys increased to 185. Find the percentage increase in the number of members if there were 150 girls in the class at first.

Answer: _____ [4m]

47. Rajah and Alex each bought a number of marbles.

Rajah gave away $\frac{2}{15}$ of his marbles to Alex leaving 156 marbles for himself.

(a) How many marbles did Rajah give to Alex?

(b) If the number of marbles given to Alex was $\frac{1}{3}$ of what Alex had, find the number of marbles Alex had at first.

(c) Alex later gave $\frac{3}{8}$ of his marbles to Rajah. Find the ratio of the number of marbles Rajah had after this to the total number of marbles bought by the two boys at first.

Answer: (a) _____ [1m]

(b) _____ [1m]

(c) _____ [3m]

48. Town P and Q are 640 km apart. Mr. Lim left Town P at 7.30 a.m. for Town Q. He travelled at an average speed of 60 km/h. 4 hours later, Mr. Tan left Town Q for Town P travelling at an average speed of 90 km/h.

At what time did the two men pass each other?

Answer: _____ m]

49. The ratio of the number of red marbles to the number of blue marbles in a box is 7 : 4. When 18 red marbles were replaced by 18 blue marbles, the number of red marbles became the same as the number of the blue marbles.

(a) How many red marbles were there at first?

(b) What will be the new ratio of the number of red marbles to the number of blue marbles if Ali removes 6 of the red marbles?

Answer (a) _____ [3m]

(b) _____ [2m]

50. During a sale, the price of every item was reduced by 5%. Mary worked at the store and was given a further 2% discount on the sale price.

(a) How much would Mary save if she bought a computer that was originally priced at $2 800 and a printer that cost $150?

(b) Find the amount in cash that Mary paid if she had included two $50 gift vouchers in the payment.

Answer (a)

(b)

End of Paper

Set by: Mdm A Ong
      Ms Chong SK
      Mr Ho KH

NUS
National University
of Singapore

P6 math (SA1) math R.G.S.

Date _____ No. _____

1)	3	11)	3	23)	$ (14 - 3Y)	
2)	4	12)	3	24)	180 minutes	
3)	3	13)	4	25)	4 : 1	
4)	1	14)	2	26)	700	
5)	2	15)	4	27)	455580	
6)	1	16)	198801	28)	3/11	
7)	2	17)	177	29)	7.92	
8)	1	18)	1/4	30)	133	
9)	4	19)	8/15	31)	135	
10)	2	20)	9, 9.08, 9.8	32)	(3/4) — 7m/3	
		21)	1500	33)	3 hours	
		22)	6			

34)	270	44) a)	0.6 kg	48)	2.10 pm		
35)	62.5 %	b)	2 files	49) a)	84 red marbles		
36)	40 Muffins	45) a)	34	b)	10 : 11		
37)	(7w - 36kg)	b)	22	50) a)	$203.55		
38)	1009	c)	125	b)	$2646.45		
39)	$367.50						
40)	250 tree	46)	58 %				
41)	264 people	47) a)	24 marbles				
42)	1 : 5	b)	72 marbles				
43)	$ 300	c)	16 21				