(45 marks)

Booklet 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. Write your answer (1, 2, 3 or 4) in the brackets provided. All diagrams in this paper are not drawn to scale unless stated otherwise.
The use of calculators is <u>NOT</u> allowed.

1.   Which of the following has the smallest value?

    (1)   0.482
    (2)   0.428
    (3)   0.453
    (4)   0.407

                                                                        (   )

2.   Which one of the following is the same as 25 kg 50 g?

    (1)   2 550 g
    (2)   2 500 g
    (3)   25 050 g
    (4)   25 500 g

                                                                        (   )

3.   Which of the following is likely the mass of a normal pencil with an eraser tip?

    (1)   0.10 g
    (2)   1.0 g
    (3)   10 g
    (4)   100 g

                                                                        (   )

4.   3 : 6 = 24 : ☐

What is the missing number in the box?

(1) 16
(2) 28
(3) 36
(4) 48

(   )

5.   Simplify 6a + 12 – 5a – 10
(1)   a + 2
(2)   a + 22
(3)   11a + 2
(4)   11a + 22

(   )

6.   Express $6\dfrac{2}{10}$ as a decimal.

(1)   6.02
(2)   6.1
(3)   6.2
(4)   6.21

(   )

7.   Mdm Chan's salary, when rounded off to the nearest hundred dollar, is $8000.
Which of the following amount is her possible salary?

(1)   7930
(2)   8110
(3)   8075
(4)   8040

(   )

8.   Express 3.5 as a percentage.

(1)   0.035 %
(2)   0.35 %
(3)   35 %
(4)   350 %

(   )

9.   The ratio of the number of plates to the number of bowls is 4 : 3. The number of cups is $\frac{3}{5}$ the number of plates. What is the ratio of the number of cups to the number of bowls.

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

(   )

10.   Arrange these weights from lightest to heaviest.

3 kg 305 g	3.35 kg	$3\frac{3}{5}$ kg

Shortest   Longest

(1) $3\frac{3}{5}$ kg   ,   3.35 kg   ,   3 km 305 g

(2) 3.35 kg   , $3\frac{3}{5}$ kg   ,   3 km 305 g

(3) $3\frac{3}{5}$ kg   ,   3 kg 305 g   ,   3.35 kg

(4) 3 kg 305 g   ,   3.35 kg   , $3\frac{3}{5}$ kg

(   )

3

11. The average height of 5 long poles is 18 m. The average height of 3 of the poles is 8 m. Find the average height of the other 2 poles?

    (1)   8 m
    (2)   18 m
    (3)   23 m
    (4)   33 m

(   )

12. The figure is formed by a square, a semi-circle and a quarter-circle. What is the area of the shaded part? Take $\pi = \dfrac{22}{7}$.

28 cm
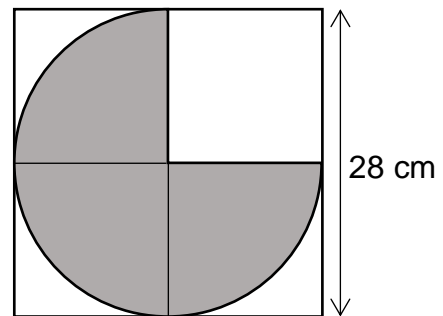
    (1)   56 cm^2
    (2)   462 cm^2
    (3)   616 cm^2
    (4)   784 cm^2

(   )

13. Bob and Charlie have a total of $47. Bob and Damien have a total of $112. The ratio of Charlie's amount of money to Damien's amount of money is 1 : 6. How much does Bob have?

    (1) $15
    (2) $20
    (3) $34
    (4) $65

(   )

14. Samantha found a recipe on Tik Tok to make pancakes.

Pancake Recipe	
(makes 9 pieces)	
Flour:	150 g
Butter:	100 g
Sugar:	50 g

She has $\frac{1}{2}$ kg of flour, 420 g of butter and 110 g of sugar. What is the greatest number of pieces of pancakes she can make?

(5) 18
(6) 27
(7) 36
(8) 81

(   )

15. A bag of 4 apples cost $3.00. Angie was given 1 free apple for every bag of apple bought. What is the maximum number of apples she could buy if she had $12?

(1) 16
(2) 18
(3) 20
(4) 24

(   )

Booklet B: (25 marks)

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. The use of calculators is NOT allowed.

(5 marks)

16. Round off the sum of 37 tens and 266 hundredths to the nearest whole number.

    Ans: _____

17. Find the value of $7 \div \dfrac{3}{5}$.

    Ans: _____

18. List the common factors of 16 and 24.

    Ans: _____
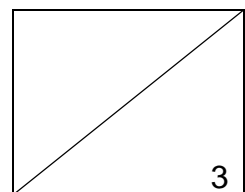
19. Express $\dfrac{3}{8}$ as a decimal.

Ans: _____

20. Look at the figure below.
    Find the area of the semi-circle in terms of π.

32cm

Ans: _____cm^2

Ans: $_____

2
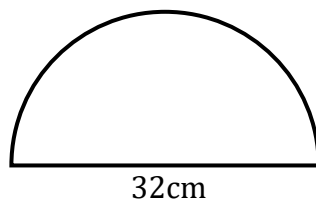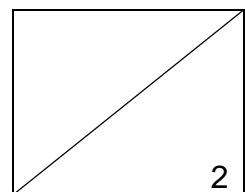
Questions 21 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. The use of calculators is <u>NOT</u> allowed.

(20 marks)

21. Kelly is 56 kg. She is 300 g heavier than her sister. What is the sister's mass in kg?

Ans: _____

22. $\frac{2}{5}$ of Peter's sweets are equal to $\frac{3}{4}$ of Ian's sweets. If the difference of the number of sweets they have is 28, find the number of sweets Peter has.

Ans: _____

23. At toy shop, 2 stuffed toys are sold for $z and a robot is sold for $50 more than a stuffed. Find the cost of the robot.

Ans: _____

6
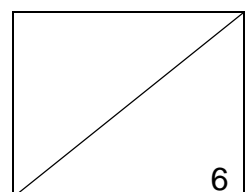
24. Mr Chan donated some books to a class. These books were shared among 30 students at first. When 10 of them gave up their share of the books, the rest received 2 extra books each. How many books did each student get at first?

Ans: _____

25. The figure below shows a square with a diagonal of 18 cm. Find the area of the square.
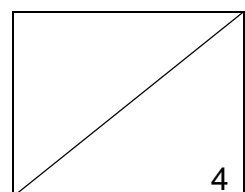

Ans: _____

4
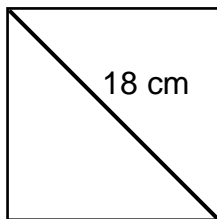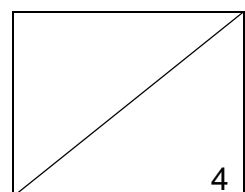
26. Amanda is 8 kg heavier than Betty but 2 kg lighter than Charlene. Charlene is 30 kg. Find the average mass of the 3 girls.

Ans: _____

27. Every month, Farah spent $1600 of her salary and saved the rest in the bank. In February, her spending decreased by 15% and she managed to save $740. What was her monthly salary?

Ans:_____

4

28. In the figure below, *ABCD* is a rectangle and the length *EB* is $\frac{3}{5}$ that of length *BC*. If *BC* = 25 cm, find the area of the shaded part.

A   E   B

D   C
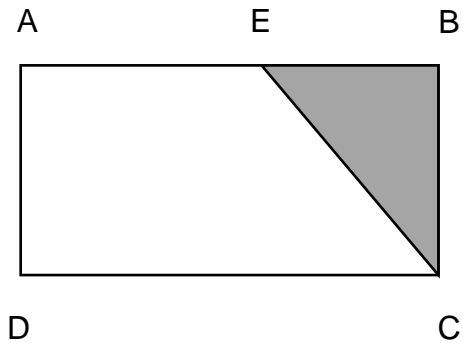
Ans: _____

29. A box filled with blue cubes completely has a mass of 1.625 kg. It has a mass of 1.361 kg when it is $\frac{4}{7}$ filed with blue cubes. What is the mass of the empty container?

Ans: _____

4
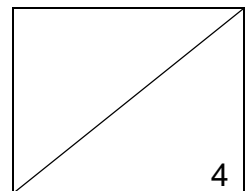
30. 12 workers were hired to paint the same number of walls each. 3 workers did not turn up and the remaining workers had to paint 4 more walls each. What is the total number of walls needed to be painted?

Ans: _____

```
2
```
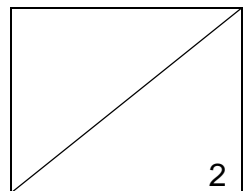
PSLE STANDARD MATHEMATICS

PAPER 2

(55 marks)

Questions 1 to 5 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. You may use an approved calculator.

(10 marks)

1. Larry installed a water tank for his house. It measures 3 m in height and has a square base of 90 cm. What is the volume of water in the tank when it is $\frac{1}{3}$ filled with water?

    Ans: _____

2. The ratio of the number of red buttons to orange buttons is 2 : 3. The ratio of the number of red buttons to white buttons is 6 : 5. If there are 25 more red buttons than white buttons, how many buttons are there in all?

    Ans: _____

4

1
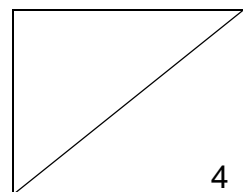
3. The picture below shows part of the seating plan of Ms Tan's classroom.

			Cherry
Don			
	Amy	Ben	

N
↑

a) Circle the words that describe Amy and Ben's seating position correctly in the following statement:

Amy is seated (north / south / east / west) of Ben.

b) Cherry is seated north-east of Eugene and Don is seated north-west of Eugene. Put a cross (X) in the square when Eugene is seated.
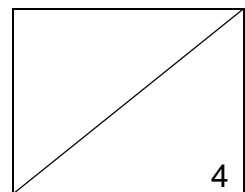
2
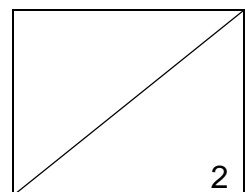
4. Kent's age is $\frac{2}{3}$ Justin's age now. In 8 years' time, the ratio of Kent's age to Justin's age will be 10 : 13. How old is Kent now?

Ans: _____

5. Sandy baked a total of 165 pies in 3 days. Every day, she baked 5 more pies than the previous day. How many pies did she bake on the first day?

Ans: _____

4

For questions 6 to 17, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded is shown in brackets [ ] at the end of each question or part-question.

(45 marks)

6.   Pauline bought a vacuum cleaner at a store and got a special discount of 30% and she paid a total of $1050 excluding 8% goods and services tax (GST). What was the original price of the vacuum cleaner including GST?
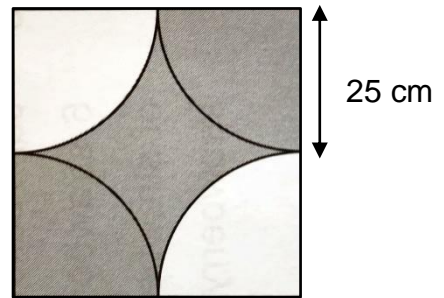
Ans: _____ [3]

7.   The mass of Ahmad is 18y kg and the mass of Bala is 6 kg lighter than Ahmad. What is the average mass of the 2 children? (In terms of y).

Ans: _____ [3]

6
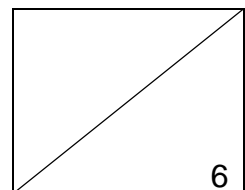
8. The figure below shows 4 identical quarters in a square. Find the perimeter of the shaded part. (Take π = 3.14)
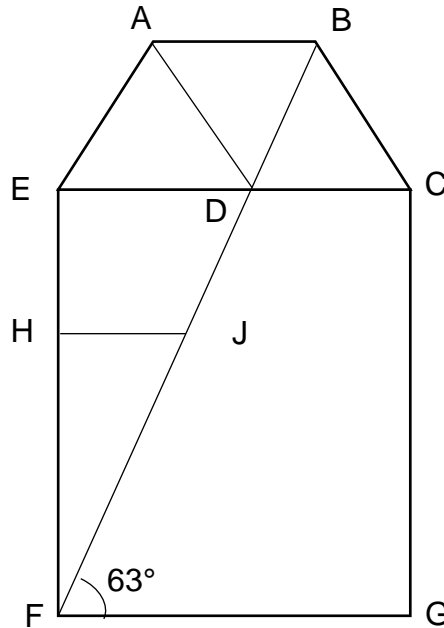
25 cm

Ans: _____ [3]

9. In a warehouse, there were buses, tricycles and e-scooters in a ratio of 12 : 5 : 9. There were 405 wheels altogether. How many buses and e-scooters were there?

Ans: _____ [3]

6

5
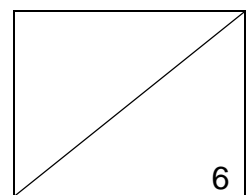
10. Look at the figure below. ABCD and ABDE are rhombuses. CEFQ is a square and ∠DFG = 63°.

a) Find ∠CDF.

Ans: _____ [1]

b) The figure above is not drawn to scale. The statements below are either true, false or not possible to tell from the information given above. For each statement, put an (X) to indicate your answer.

Statement	True	False	Not possible to tell
AE is parallel to DF.		X	
EDJH is a trapezium.			X
ABD is an equilateral triangle.	X		

Ans: _____ [2]

3
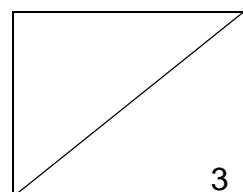
11. The number of Danny's toy cars was $\frac{5}{7}$ the number of Eugene's toy cars. After Danny bought 14% more toy cars and Eugene gave away 30% of his toy cars, Danny had 280 more toy cars than Eugene. How many toy cars did Danny have in the end?
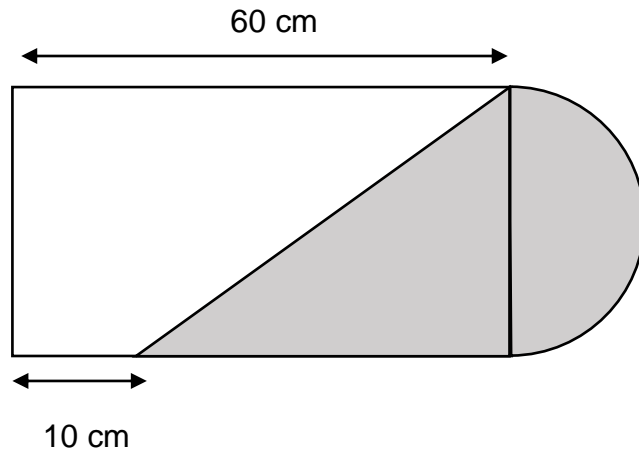
Ans: _____ [4]

12. A total of 100 tennis balls and baseballs were kept in the storeroom. Henry put another 12 tennis balls and took 50% of the baseballs from the storeroom. The total number of tennis balls and baseballs became 102. Find the percentage increase in the number of tennis balls.

Ans: _____ [4]

8
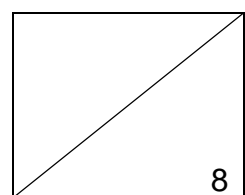
13. The figure is made up of a semicircle and a rectangle. The breadth of the rectangle is $\frac{1}{3}$ of the length. What is the area of the shaded part? (Take π = 3.14)

60 cm

10 cm

14. Tony had a rectangular piece of paper. He painted $\frac{2}{5}$ of it red, $\frac{1}{3}$ of it green and $\frac{1}{2}$ of the remaining blue. He had 240 cm² of the paper left to be painted. If the length of the whole art paper was twice its breadth, what was its perimeter?
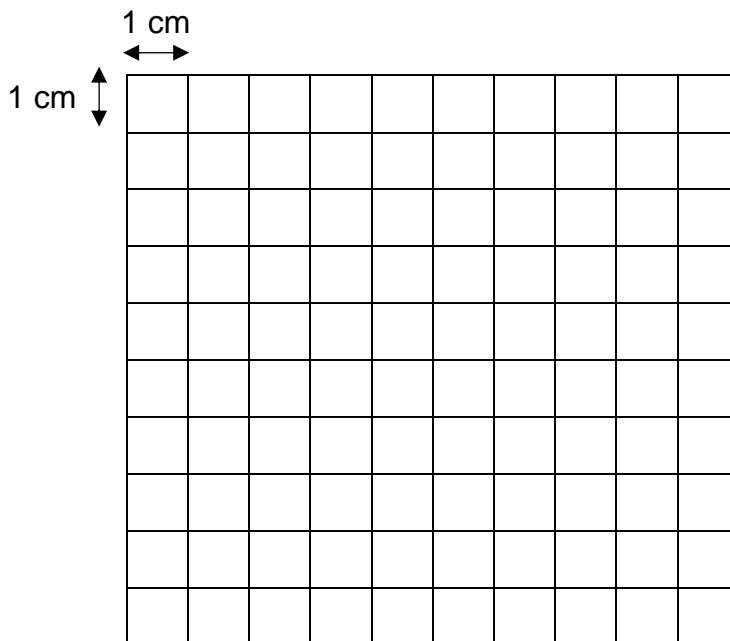
Ans: _____ [4]

8

15. The figure below shows a Triangle ABC drawn a square grid.
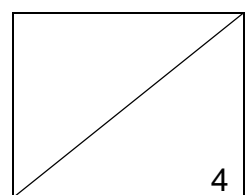
1 cm

1 cm
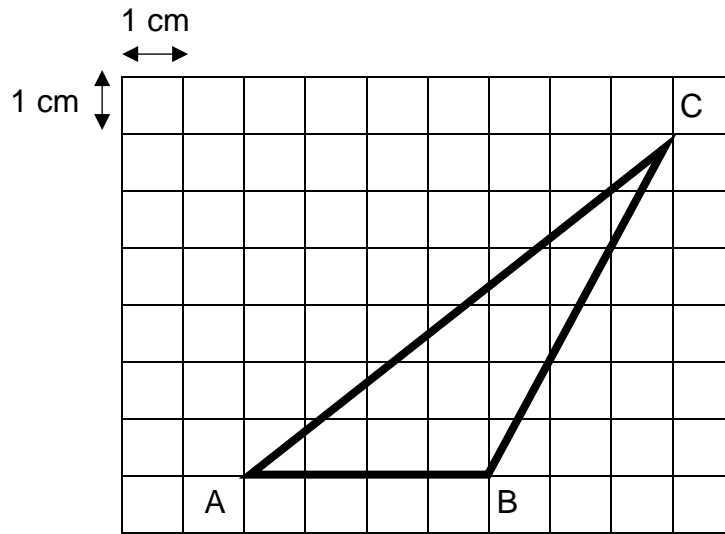
a) Find the area of Triangle ABC.

Ans: _____ [1]

b) Draw an isosceles Triangle DEF on the square grid below. The ratio of the area of isosceles DEF to the area of the above Triangle ABC is 3 : 2.
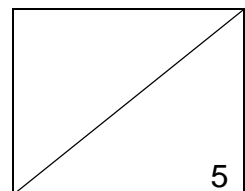
1 cm

1 cm

Ans: _____ [3]

4

9

16. Christmas was around the corner. Billy and Charlie decided to share the cost of present for their mother. The ratio of Billy's share to Charlie's share was 4 : 6. When they checked the price of the present again, the cost increased by 20%. As a result, Billy had to pay $62.40 for his share. What was the original cost of the present?
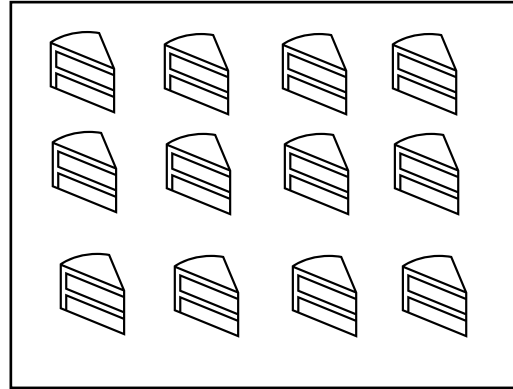
Ans: _____ [5]

17. Cupcakes and cakes were sold in packs by EZ Store. Nancy, Violet and Daisy bought cupcakes and cakes at the prices shown below.
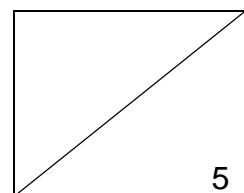
Cupcakes
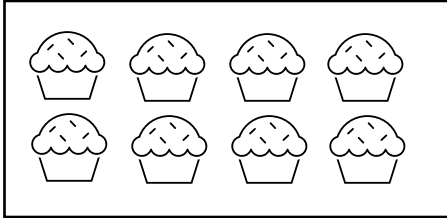
4 packs for $12

Cakes

6 packs for $15

(a) Nancy wanted to spend an equal amount of money on cupcakes and cakes. Find the **minimum** number of cakes she bought.

(b) Daisy bought some packs of cupcakes and Violet spent $84 on cupcakes. Violet then gave Daisy 20 cupcakes. In the end, Violet had 88 more cupcakes than Daisy. How many packs of cupcakes did Daisy buy?

Ans: (a) _____ [2]

Ans: (b) _____ [3]

5

End of Paper 2