

PSLE STANDARD MATHEMATICS

PAPER 1

(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 NOT allowed.

1. Simplify $5b + 15 - 2b - 10$.

- (1) $3b - 5$
- (2) $3b + 5$
- (3) $7b - 5$
- (4) $7b + 5$

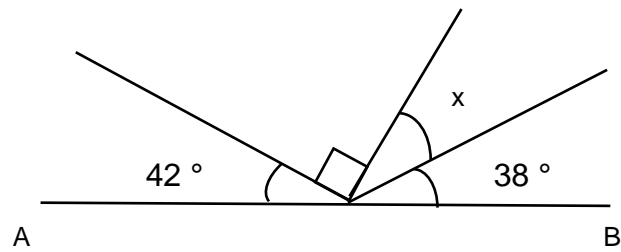
()

2. Find the value of $\frac{3}{4} \div \frac{6}{7}$.

- (1) $\frac{9}{14}$
- (2) $\frac{7}{8}$
- (3) $1\frac{1}{7}$
- (4) $1\frac{5}{9}$

()

3. AB is a straight line as shown in the figure. Find $\angle x$.



- (1) 10°
 (2) 20°
 (3) 48°
 (4) 52°

()

4. $4 : 7 = 32 : \square$

What is the missing number in the box?

- (1) 42
 (2) 49
 (3) 56
 (4) 63

()

5. Arrange the following distances from the shortest to the longest.

$6\frac{2}{3}$ km	6 km 66 m	6.6 km
-------------------	-----------	--------

Shortest

Longest

- (1) 6 km 66 m $6\frac{2}{3}$ km 6.6 km
 (2) 6 km 66 m 6.6 km $6\frac{2}{3}$ km
 (3) $6\frac{2}{3}$ km 6.6 km 6 km 66 m
 (4) 6.6 km 6 km 66 m $6\frac{2}{3}$ km

()

6. Express $2\frac{3}{8}$ as a decimal.

- (1) 2.3
- (2) 2.38
- (3) 2.125
- (4) 2.375

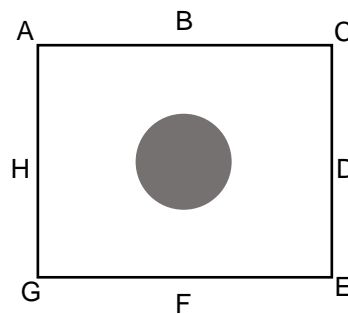
()

7. Find the value of $\frac{8+p}{2} + p$ when $p = 4$.

- (1) 6
- (2) 8
- (3) 10
- (4) 20

()

8. The figure below shows Linda standing in a square field. She was facing South at first. She then turned anti-clockwise to face Point A of the field. How many degrees did she turn in the anti-clockwise direction?



- (1) 135°
- (2) 180°
- (3) 225°
- (4) 270°

()

9. Express 1.9 as a percentage.

- (1) 0.019 %
- (2) 0.19 %
- (3) 19 %
- (4) 190 %

()

10. Which of the following is most likely to be the mass of a can of Pepsi?

- (1) 330 g
- (2) 330 kg
- (3) 33 g
- (4) 33 kg

()

11. Charles and Susan baked some cookies in the ratio of 3 : 7. Charles baked 60 fewer cookies than Susan. How many cookies did they bake altogether?

- (1) 45
- (2) 105
- (3) 150
- (4) 200

()

12. Glenda bought a pizza. She ate $\frac{1}{4}$ of the pizza and gave the remaining pizza equally to her 2 friends. What fraction did each of her friend get?

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

()

13. The table below shows the charges for renting a bicycle on the weekend.

Renting charges per bicycle	
For the first hour	\$8.00
For every additional hour	\$6.00
*Rent 3 hours and get the next 1 hour free	

Mr Chan rented bicycles from 11am to 3pm on Saturday. How much did he pay altogether for renting the bicycles?

- (1) \$20
- (2) \$26
- (3) \$40
- (4) \$52

()

14. Lucy had two square boxes of different sizes. Each side of the bigger box is 2 times as long as each side of the smaller box. Lucy can pack exactly 64 1-cm cubes into the smaller box. How many 1-cm cubes can she pack exactly into the bigger box?

- (1) 128
- (2) 192
- (3) 256
- (4) 512

()

15. The price of a soccer match was \$120. There was an early bird discount of 25% and students were given a further discount of \$12. How much did one early bird student's discount ticket cost?

- (1) \$78
- (2) \$81
- (3) \$90
- (4) \$108

()

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. What is the value of $\frac{5n+13}{4}$ when $n = 11$?

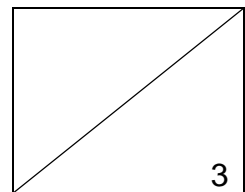
Ans: _____

17. Find the average of 14, 25 and 36.

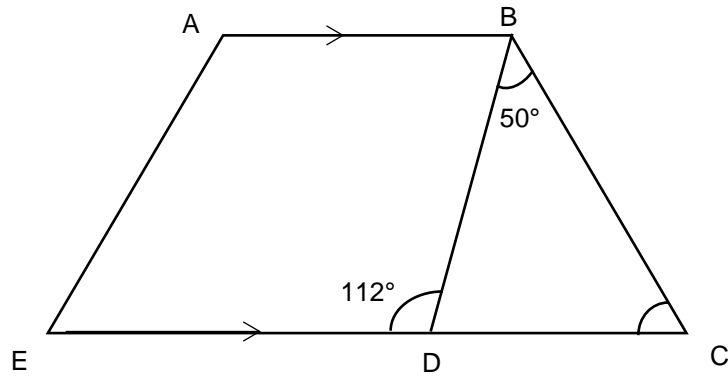
Ans: _____

18. Express $\frac{3}{8}$ as a decimal.

Ans: _____

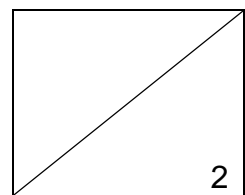
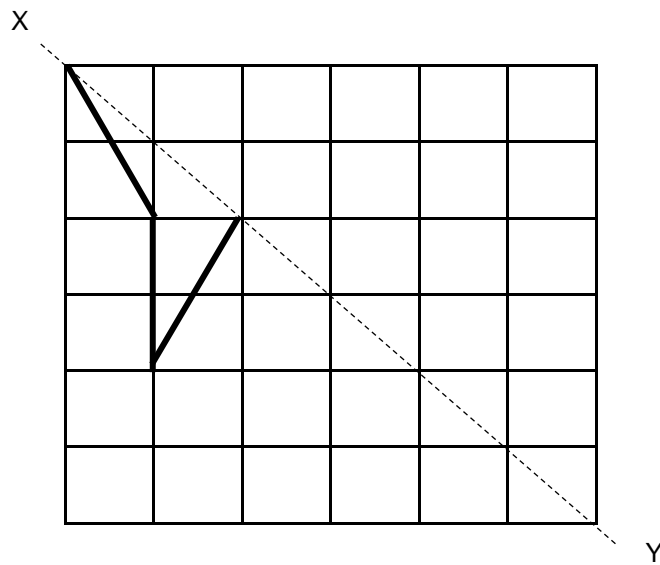


19. ABCD is a trapezium. $\angle CBD = 50^\circ$ and $\angle EDB = 112^\circ$. Find $\angle BCD$.



Ans: _____ $^\circ$

20. Complete the symmetric below with XY as the line of symmetry.



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 NOT allowed.

(20 marks)

21. The average of a set of three different 2-digit numbers is 32. Find the largest possible number in the set.

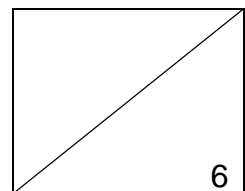
Ans: _____

22. Pauline baked some cookies. If she gives each of her friends 6 cookies, she will have no remainder. If she gives each of them 4 cookies instead, she will have 24 cookies left. How many cookies did Pauline bake? (M)

Ans: _____

23. $\frac{2}{5}$ of Harry's mass is equal to $\frac{3}{4}$ of Tom's mass. Express Harry's mass as a fraction of the total mass of both boys.

Ans: _____



24. Agnes, Bob, and Charlie saved money in the ratio of 3 : 5 : 7. The difference between the largest amount and smallest amount is \$52. What is the amount that Bob saved?

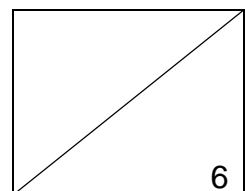
Ans: \$ _____

25. A factory produces 320 toys. 60% of them are toy cars. 25% of the toy cars are red. How many red toy cars does the factory produce?

Ans: _____

26. Mrs Lee baked $3w$ cupcakes in the afternoon. She baked $3w + 8$ cupcakes in the evening. Altogether, she baked 80 cupcakes that day. How many cupcakes did she bake in the afternoon?

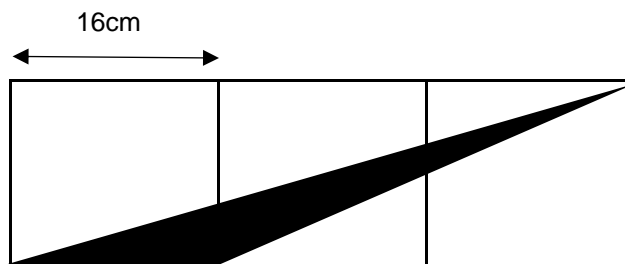
Ans: _____



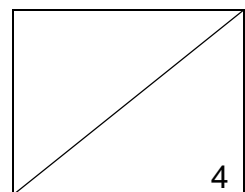
27. A box contains beads of three different colours. $\frac{2}{5}$ of them are blue. The ratio of the number of green beads to that of the red beads is 4 : 3. What is the ratio of the number of blue beads to the number of red beads?

Ans: _____

28. The figure below is made up of 3 similar squares, each of side 16 cm. What is the area of the shaded triangle?



Ans: _____ cm²

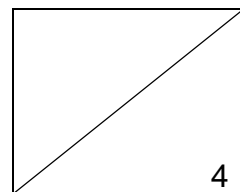
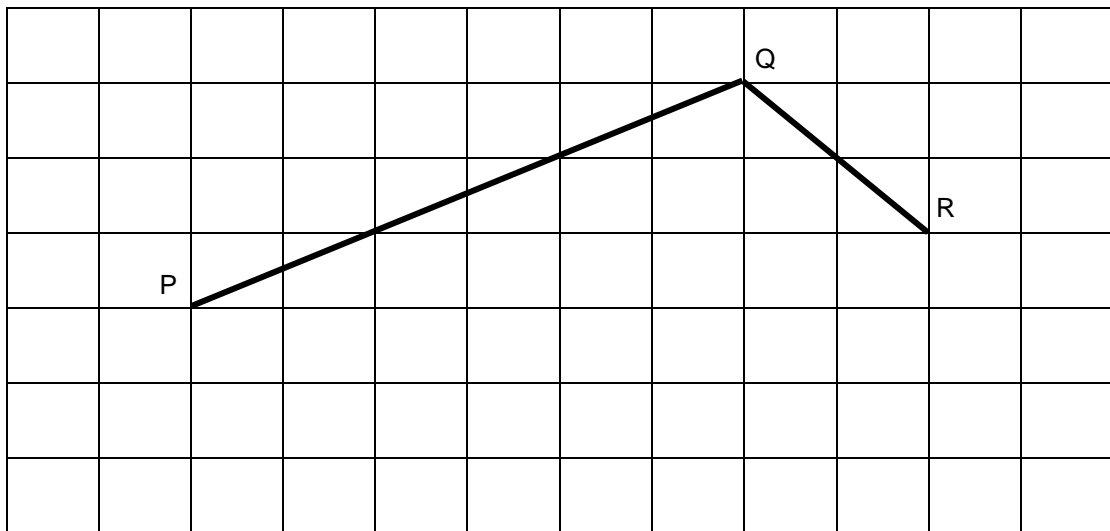


29. A number has 15 as a factor.

Each statement below is either 'True', 'False', or 'Not possible to tell' from the information given. For each statement, put a (✓) in the correct column.

No	Statement	True	False	Not possible to tell
1	The number is a multiple of 3.			
2	The number is an even number.			

30. In the square grid below, PQ and QR form two sides of the parallelogram PQRS. Complete the drawing of the parallelogram PQRS.



PSLE STANDARD MATHEMATICS

PAPER 2

(55 marks)

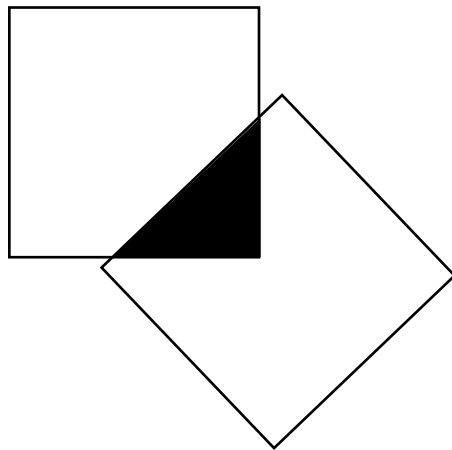
Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. You may use an approved calculator.

(10 marks)

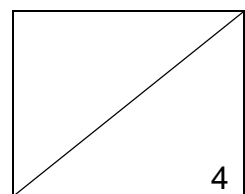
1. How many common factors of 44 and 88 are there?

Ans: _____

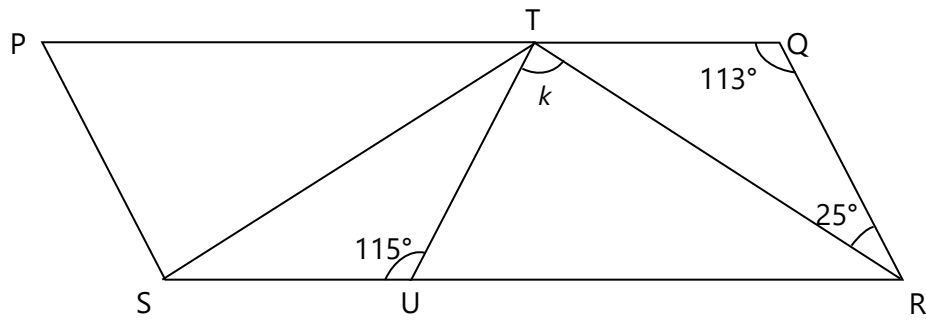
2. The figure below shows 2 identical squares. The shaded area is 15% of each square. Find the ratio of the shaded area to the area of the figure.



Ans: _____



3. The figure below shows a parallelogram PQRS. Find $\angle k$.

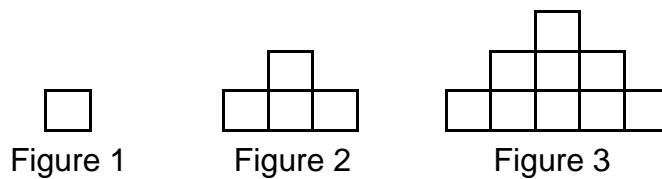


Ans: _____°

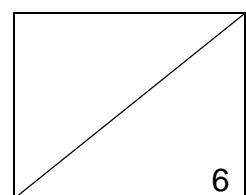
4. Mrs Teo is 4 times as old as her daughter. Her daughter is 8 years old. In how many years' time would her daughter be $\frac{1}{3}$ of Mrs Teo's age?

Ans: _____

5. The figures are made of squares. Study the pattern carefully. How many squares are there in Figure 13?



Ans: _____



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. Larry spent \$750 of his monthly salary on entertainment. He spent $\frac{3}{7}$ of his remaining salary on food. After that, he had $\frac{1}{3}$ of his salary left. How much of his salary did he spend on transport?

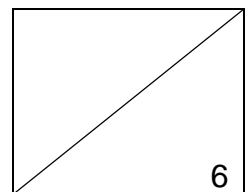
Ans: _____ [3]

7. A leaking tap leaks 2 ml of water in 1 second.

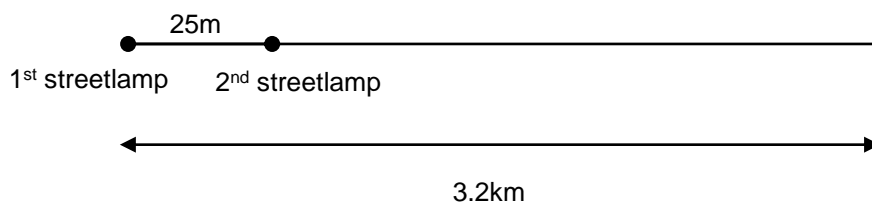
- (a) How many litres of water are wasted if the tap leaks for a whole day?
(b) If the water costs 20 cents per litre, how much would the wasted water cost?

Ans: (a) _____ [2]

Ans: (b) _____ [1]

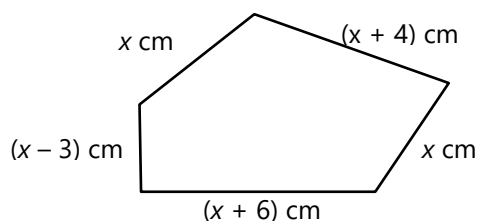


8. Streetlamps were installed along a straight road. There was a distance of 25m between every two streetlamps. Each streetlamp cost \$55. How much did it cost to install all the streetlamps on a stretch of road measuring 3.2km?



Ans: _____ [3]

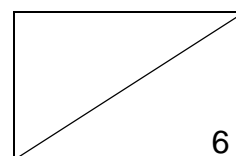
9. Tom had 105 cm of wire. He used some of it to make the figure shown below.



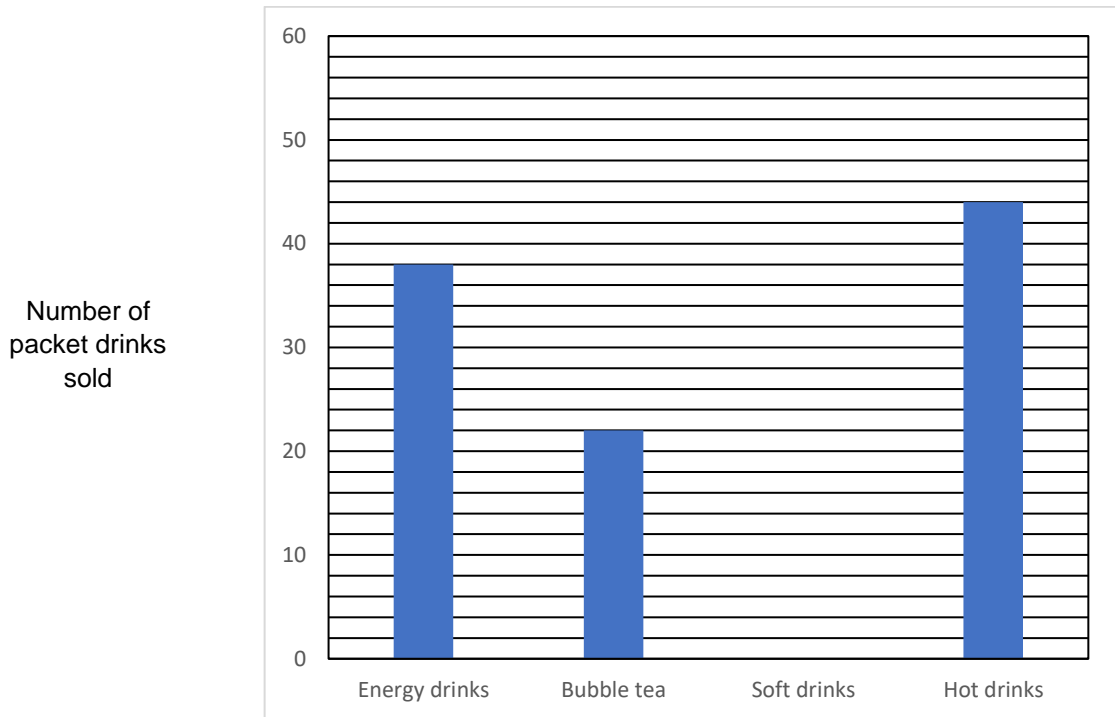
- (a) How much of the wire did Tom use to make the figure?
Leave your answer in the simplest form in terms of x .
- (b) If $x = 14$, how much of the wire was left in the end?

Ans: (a) _____ [1]

(a) _____ [2]



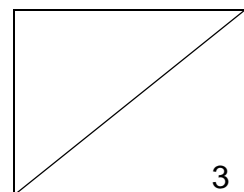
10. The bar graph below shows the number of packet drinks sold on Tuesday. The bar that shows the number of soft drinks has not been drawn.



- (a) How many more packets of Hot drinks were sold than Energy drinks?
 (b) 35% of all the drinks sold were soft drinks. In the graph above, draw the bar to show the number of packet drinks sold.

Ans: (a) _____ [1]

(b) _____ [2]



11. At a TV show, there were 402 people in the audience. A child's ticket costs half as much as the cost of an adult's ticket. An adult ticket costs \$58. A total of \$17 690 was collected from all the tickets sold.

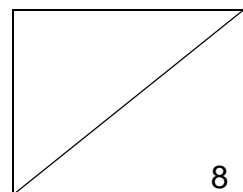
- (a) Find the cost of a child's ticket.
- (b) How many children were in the audience?

Ans: (a) _____ [1]

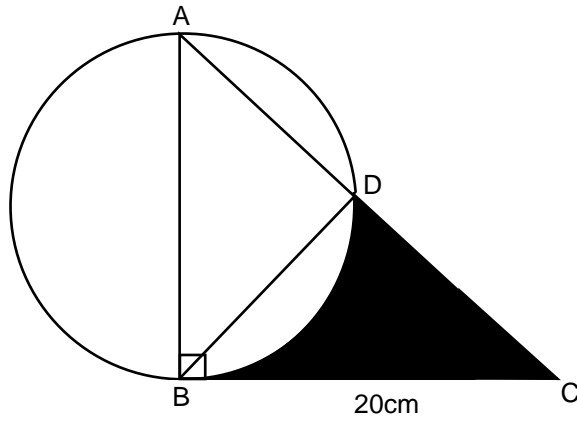
Ans: (b) _____ [3]

12. Mr Tan earns a commission of \$2500 for every car he sold. For every 10 cars sold, he received an additional bonus of \$3000. In the first 6 months of this year, he earned a total of \$127 000. How many cars did Mr Tan sell in the first 6 months of this year?

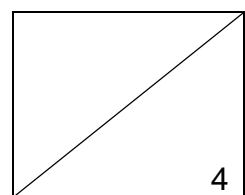
Ans: _____ [4]



13. The figure shows a circle and right-angled isosceles triangle. $AB = BC = 20$ cm. Find the shaded area. (Take $\pi = 3.14$)



Ans: _____ [4]

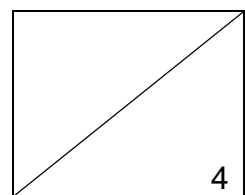


14. The average mass of Andrea, Berlinda, Charlene and Diana is 38 kg. The average mass of Andrea, Berlinda, and Charlene is 37 kg while the total mass of Charlene and Diana is 77 kg.

(a) Find Charlene's mass.

(b) Berlinda and Diana have the same mass. Find Andrea's mass.

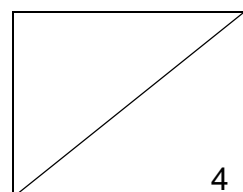
Ans: _____ [4]



15. A pail was filled with $\frac{7}{8}$ ℓ of water at first. $\frac{1}{12}$ ℓ of the water was used and the remaining water was poured into bottles, each with a capacity of $\frac{1}{6}$ ℓ.

- (a) How many such bottles were filled **at most**?
(b) How much water was left? Give your answer as a fraction in its simplest form.

Ans: _____ [4]

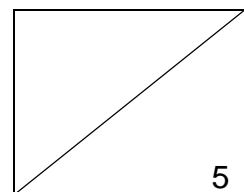


16. The usual price of a typewriter sold in Store A was \$144. This was 96% of the usual price of an identical typewriter sold in Store B. Both stores gave the same percentage discount on a typewriter during a sale. During the sale, the typewriter in Store B cost \$112.50 after the discount.

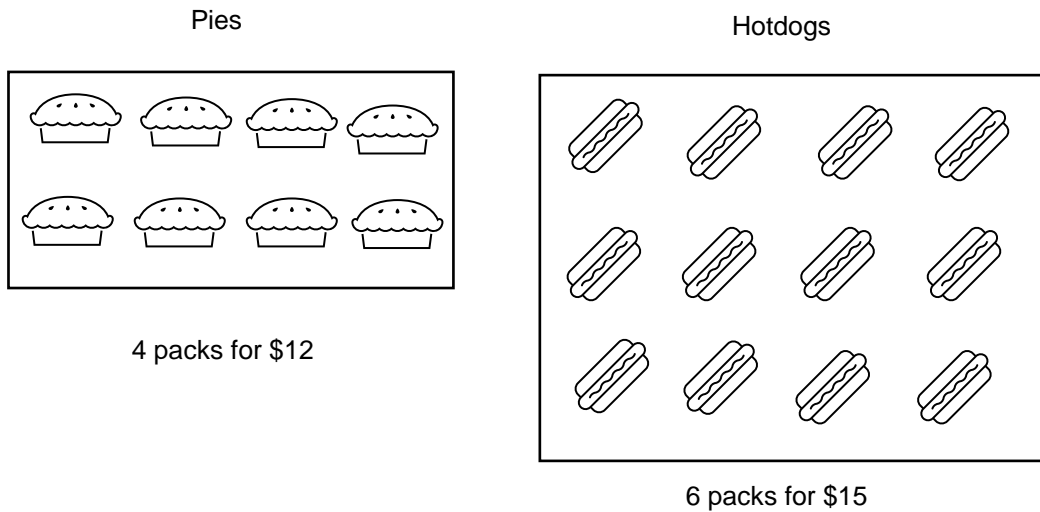
- (a) What was the usual price of the typewriter in Store B?
(b) What was the discount given for the typewriter in Store A during the sale?

Ans: (a) _____ [2]

Ans: (b) _____ [3]



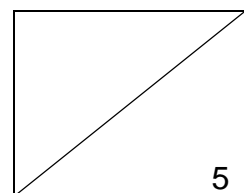
17. Hotdogs and pies were sold in packs by Comfort Store. Mrs Chen, Mrs Rahmah and Mrs Ong bought hotdogs and pies at the prices shown below.



- (a) Mrs Chen wanted to spend an equal amount of money on pies and hotdogs. Find the **minimum** number of packs of hotdogs she bought.
- (b) Mrs Ong bought some packs of pies and Mrs Rahmah spent \$84 on pies. Mrs Rahmah then gave Mrs Ong 20 pies. In the end, Mrs Rahmah had 88 more pies than Mrs Ong. How many packs of pies did Mrs Ong buy?

Ans: (a) _____ [2]

Ans: (b) _____ [3]



End of Paper 2