



# RAFFLES GIRLS' PRIMARY SCHOOL

## SEMESTRAL ASSESSMENT 1 2011

Your Score Out of <b>100</b> marks		
	Class	Level
Highest score		
Average score		
Parent's Signature		

Name : \_\_\_\_\_ ( ) Class: P4\_\_

**10 MAY 2011 MATHEMATICS** Att: 1 h 45 min

### SECTION A (25 marks)

Question 1 to 5 carry 1 mark each. Question 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 your answer (1, 2, 3 or 4) on the OAS provided.

1. In 97 518, the digit \_\_\_ is in the thousands place.

- (1) 1
- (2) 5
- (3) 7
- (4) 9

( )

2. Round off 5495 to the nearest hundred.

- (1) 5000
- (2) 5400
- (3) 5500
- (4) 6000

( )

3. Madam Hasni makes 327 curry puffs every day. How many curry puffs will she make in 8 days?

- (1) 2416
- (2) 2602
- (3) 2616
- (4) 3416

( )

4. Multiply 379 by 7 tens. The answer is \_\_\_\_\_.

- (1) 2553
- (2) 2653
- (3) 25530
- (4) 26530

(     )

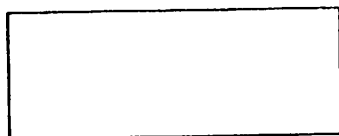
5. Express 3 m 2 cm in centimetres.

- (1) 32 cm
- (2) 302 cm
- (3) 3002 cm
- (4) 3020 cm

(     )

6. The perimeter of rectangle A is 7 times its breadth.

If the perimeter of rectangle A is 28 cm, find its length.



rectangle A

- (1) 20 cm
- (2) 10 cm
- (3) 7 cm
- (4) 4 cm

(     )

7. Express 4050 g in kilograms and grams.

- (1) 4 kg 5 g
- (2) 4 kg 50 g
- (3) 40 kg 5 g
- (4) 40 kg 50 g

(     )

8. Which of the following figures have more than 1 pair of parallel lines?

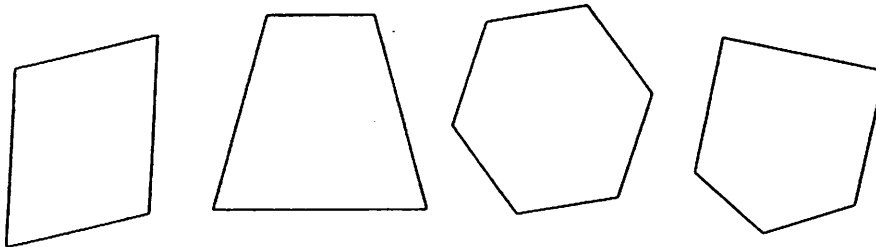


figure A

figure B

figure C

figure D

- (1) A and B only
- (2) A and C only
- (3) A, B and C only
- (4) B, C and D only

(     )

9. Fill in the box with a suitable number.

$$3\frac{1}{8} = \frac{\square}{8}$$

- (1) 24
- (2) 25
- (3) 31
- (4) 32

(     )

10. Find the value of  $4\frac{3}{10} - 1\frac{2}{5}$ .

(1)  $2\frac{1}{10}$

(2)  $2\frac{9}{10}$

(3)  $3\frac{1}{10}$

(4)  $3\frac{9}{10}$

( )

11. Sue had 250 stickers at first.

Her mother gave her another 178 stickers.

How many more stickers would Sue need in order to fill up her sticker album with 1000 stickers?

(1) 428

(2) 572

(3) 750

(4) 822

( )

12. Which of the following are common factors of 36 and 45?

(1) 3 and 6

(2) 3 and 9

(3) 5 and 6

(4) 6 and 9

( )

13. What is the first common multiple of 6 and 8?

- (1) 12
- (2) 16
- (3) 24
- (4) 48

(     )

14.

Fish burger	Chicken burger
\$ 6 each	\$ 4 each

The table above shows the prices of two different burgers at a restaurant.

Mr Tan bought 45 fish burgers and some chicken burgers.

He paid a total of \$454 for all the burgers he bought.

How many chicken burgers did Mr Tan buy?

- (1) 41
- (2) 46
- (3) 66
- (4) 71

(     )

15. Jenny had 4 red beads and 8 purple beads at first.

She bought another 4 red beads.

What fraction of her beads was red in the end?

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

(     )

**SECTION B (40 marks)**

Question 16 to 35 carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. All diagrams are not drawn to scale. Marks will be awarded for relevant working.

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16. How many 50-cent coins make up \$ 8.50?

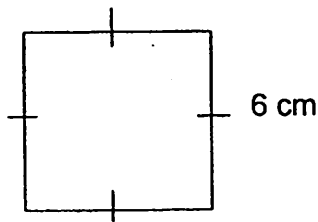
Ans: \_\_\_\_\_

17. Find the value of  $907 \times 57$ .

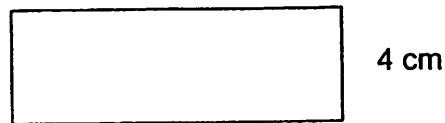
Ans: \_\_\_\_\_

18. Area of square X is the same as the area of rectangle Y.

Find the length of rectangle Y if its breadth is 4cm.



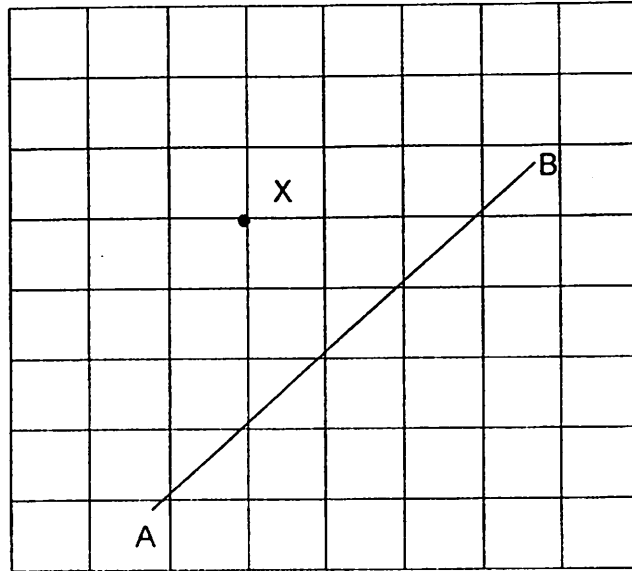
square X



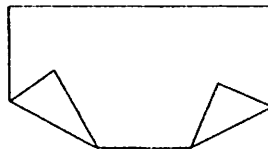
rectangle Y

Ans: \_\_\_\_\_ cm

19. Draw a line parallel to the given line, AB through the point X.



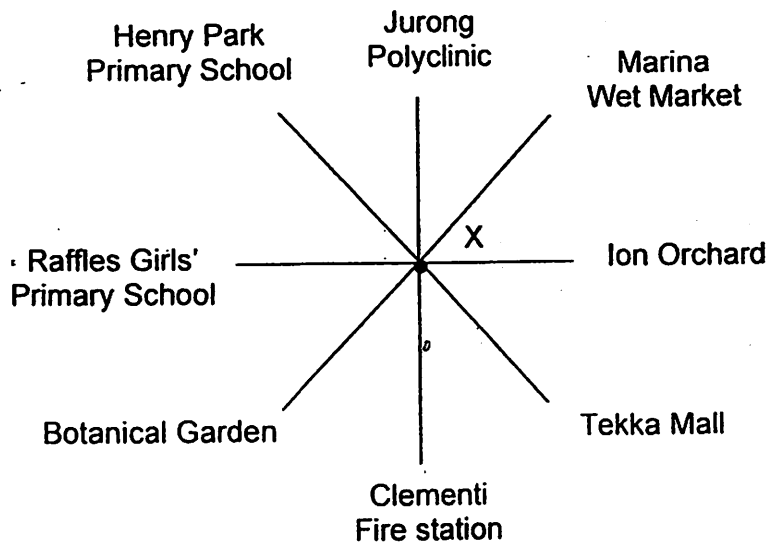
20. In the figure below, a rectangular piece of paper is folded at two of its corners as shown below.



How many right angles can you see in the figure?

Ans: \_\_\_\_\_

21. Madam Theresa is standing at the point marked X in the figure below. She is facing Tekka Mall. What will she face when she turns  $135^\circ$  anti-clockwise?



Ans: \_\_\_\_\_

22. Arrange the following in ascending order.

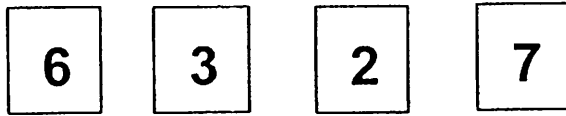
$$1\frac{1}{2}, 1\frac{3}{4}, 1\frac{1}{3}, 1\frac{5}{6}$$

Ans: \_\_\_\_\_

23. Mei Li had \$28. She spent  $\frac{4}{7}$  of the money on toys and saved the rest. How much did she save?

Ans: \$ \_\_\_\_\_

24. Siti used all the digits below to form two different 2-digit numbers which have the biggest possible difference. What is the difference?




Ans: \_\_\_\_\_

25. The value of 5 ten thousands, 9 tens and 2 ones is \_\_\_\_\_.

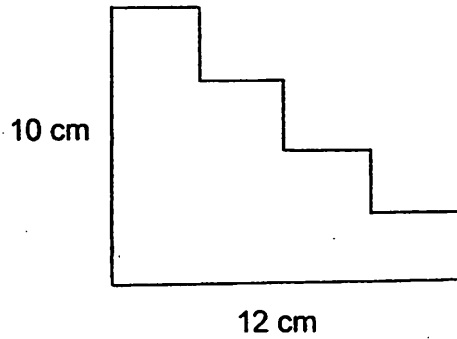
Ans: \_\_\_\_\_

26. Jennifer bought some sweets for her friends on her birthday. She packed all the sweets she had into 193 packets and had 8 sweets left.

If each packet contained 12 sweets, how many sweets did she buy?

Ans: \_\_\_\_\_

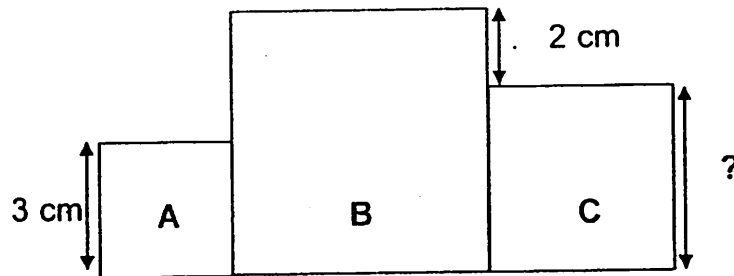
27. Find the perimeter of the figure below.



Ans: \_\_\_\_\_ cm

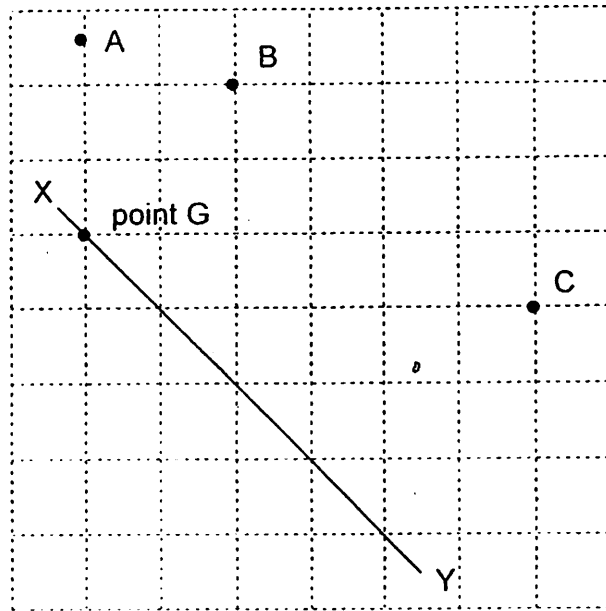
28. The diagram below is made up of three squares A, B and C. The area of square B is four times the area of square A.

Find the length of square C.



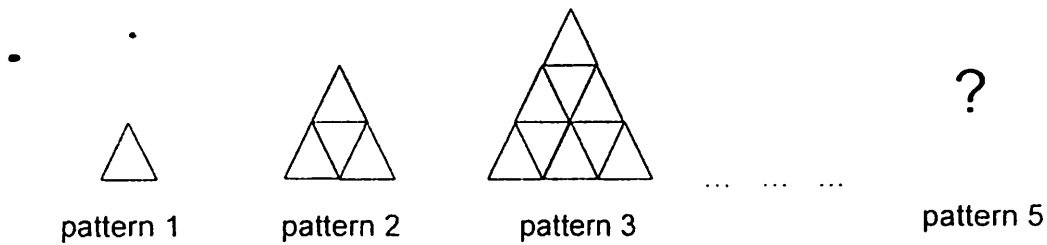
Ans: \_\_\_\_\_ cm

29. Which dot A, B or C, when joins to point G, could form a line perpendicular to line XY?



Ans: Dot \_\_\_\_\_

30. Study the pattern below. Matchsticks are used to form each pattern.



Find out the number of matchsticks needed to form pattern 5.

Pattern	1	2	3	4	5
Number of sticks used	3	9	18	30	?

Ans: \_\_\_\_\_

31. Express  $\frac{51}{9}$  as a mixed number in the simplest form.

Ans: \_\_\_\_\_

32. Find the value of  $5 - \frac{5}{8} - 1\frac{1}{2}$ . Leave your answer in the simplest form.

Ans: \_\_\_\_\_

33. Study the pattern below and fill in the blank.

1 , 2 , 5 , 10 , \_\_\_\_\_ , 26 , 37 , 50

Ans: \_\_\_\_\_

34. There were 600 people in an auditorium.  
 $\frac{4}{5}$  of them were adults and the rest were children.  
 $\frac{3}{8}$  of the adults were men. How many women were there at the auditorium?

Ans: \_\_\_\_\_

35. If  $\frac{3}{5}$  of a number is 30, what is the number?

Ans: \_\_\_\_\_

**SECTION C (35 marks)**

For question 36 to 44, show your working clearly in the space provided below each question and write your answer with suitable units in the spaces provided. All diagrams are not drawn to scale. Answers in fractions must be expressed in the simplest form. Marks will be awarded for relevant working. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

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36. John and Mary had 372 sweets altogether. After Mary had given 42 sweets to John, John had 3 times as many sweets as Mary. How many sweets did Mary have at first?

Ans: \_\_\_\_\_ [3]

37. Rick and Peter each save an equal sum of money each day.

Rick can save \$ 24 in 4 days.

Peter can save \$ 48 in 6 days.

(a) How much more does Peter save than Rick in 1 day?

(b) How many days will it take Peter to save \$100 more than Rick when they both start saving on the same day?

Ans: (a) \_\_\_\_\_ [2]

(b) \_\_\_\_\_ [2]

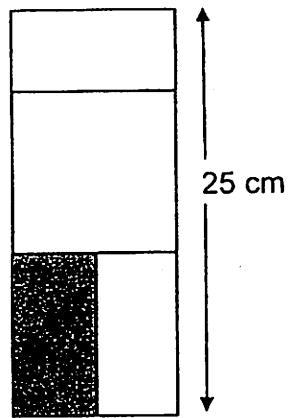
38. For every 4 beads that Minah has, Mary has 2 more beads than her. They have 60 beads altogether. How many beads does Mary have?

Ans: \_\_\_\_\_ [3]

39. Mrs Tay bought a 10-kg cake.  
She ate  $\frac{1}{5}$  of it and gave  $3\frac{1}{2}$  kg to her friend.  
How much cake had she left?

Answer: \_\_\_\_\_ [3]

40. The figure below is made up of a square and 3 identical rectangles.



- (a) Find the perimeter of the figure.
- (b) Find the area of the shaded rectangle.

Ans: (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [1]

41. Alice bought 2 kg 50 g of meat.

Bernice bought 30 g of meat less than Alice, and Candice bought 550 g of meat more than Bernice.

How much meat did the 3 girls buy altogether?

Ans: \_\_\_\_\_ [4]

42. Joan and Marie bought some candies from The Candy Empire.  
Joan bought 125 candies from the shop while Marie bought three times as many candies as Joan.

(a) How many candies did Marie buy?

(b) How many candies must Marie give to Joan so that Joan had 50 candies less than her?

Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [3]

43. Mary went shopping with some money.

She spent  $\frac{1}{4}$  of the money on a toaster. She also bought a skirt for \$ 76.

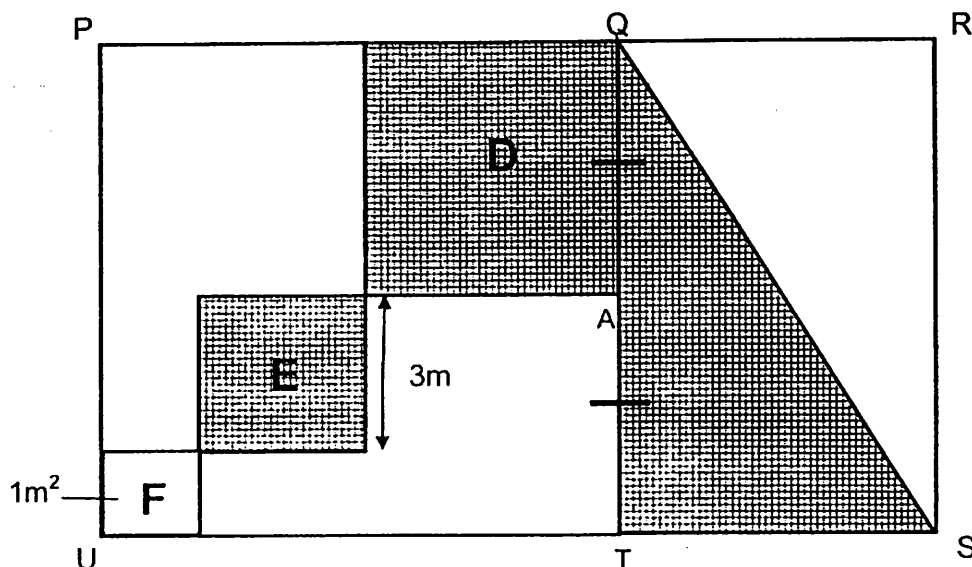
After that she went to a CD shop and bought 5 CDs at \$19 each.

She then had \$15 left.

How much did she have at first?

Ans: \_\_\_\_\_ [5]

44. The diagram below shows a rectangle PRSU, which is made up of square PQTU and rectangle QRST. Figure D, E and F are squares and the area of square F is  $1\text{m}^2$ . The area of square D is  $\frac{2}{3}$  of the shaded area in rectangle QRST and  $QA = AT$  as shown in the figure below.



- (a) Find the area of square E.
- (b) Find the total area of the unshaded parts in rectangular field PRSU.

Ans: (a) \_\_\_\_\_ [1]

(b) \_\_\_\_\_ [4]

-End of Paper-

Please check your work carefully ☺

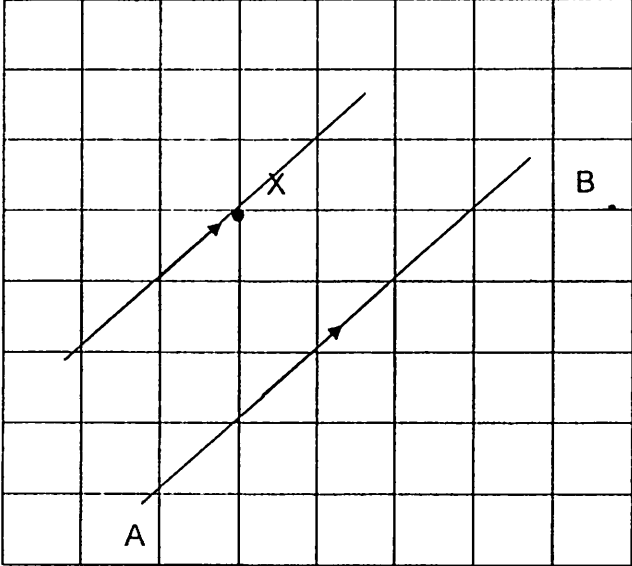
Setters: Miss Wai Sook Har  
Mr. Darren Lau

**RGPS P4 SA1 Mathematics 2011 Answer Key ( Do NOT give it for pupils)**

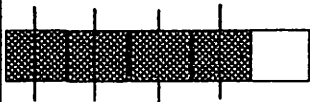
**Section A (1m each for Q1 - 5; 2m each for Q6 - 15)**

1) 3	6) 2	11) 2
2) 3	7) 2	12) 2
3) 3	8) 2	13) 3
4) 4	9) 2	14) 2
5) 2	10) 2	15) 1

(2 marks each)

16)	$850 \div 50 = \underline{17}$ (M1, A1) or drawing of coins
17)	$907 \times 57 = \underline{51699}$ (A2)
18)	$6 \times 6 = 36$ $36 \div 4 = \underline{9}$ (M1, A1)
19)	 <p>*Deduct 1m if no arrows</p>
20)	4 (A2)
21)	Jurong Polyclinic (A2)

22)	$1\frac{1}{3}, 1\frac{1}{2}, 1\frac{3}{4}, 1\frac{5}{6}$ [A2] or equivalent (M1)										
23)	<p>Method 1</p> $1 - \frac{4}{7} = \frac{3}{7}$ $\frac{3}{7} \times 28 = 12 \quad \text{[M1, A1]}$ <p>Method 2</p> $\frac{4}{7} \times 28 = 16 \quad \text{[M1]}$ $28 - 16 = \underline{12} \quad \text{[A1]}$										
24)	$76 - 23 = \underline{53}$ [M1, A1]										
25)	$50000 + 90 + 2 = \underline{50\ 092}$ [M1, A1]										
26)	$193 \times 12 = 2316$ $2316 + 8 = \underline{2324}$ (M1, A1)										
27)	$10 + 10 + 12 + 12 = \underline{44}$ [M1, A1] Or $22 \times 2 = \underline{44}$ [M1, A1]										
28)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Method 1</td> <td style="width: 50%;">Method 2</td> </tr> <tr> <td><math>3 \times 3 = 9</math></td> <td><math>3 \times 2 = 6 \quad \text{(M1)}</math></td> </tr> <tr> <td><math>9 \times 4 = 36</math></td> <td><math>6 - 2 = \underline{4} \quad \text{[A1]}</math></td> </tr> <tr> <td><math>6 \times 6 = 36 \text{ (M1)}</math></td> <td></td> </tr> <tr> <td><math>6 - 2 = \underline{4} \text{ (A1)}</math></td> <td></td> </tr> </table>	Method 1	Method 2	$3 \times 3 = 9$	$3 \times 2 = 6 \quad \text{(M1)}$	$9 \times 4 = 36$	$6 - 2 = \underline{4} \quad \text{[A1]}$	$6 \times 6 = 36 \text{ (M1)}$		$6 - 2 = \underline{4} \text{ (A1)}$	
Method 1	Method 2										
$3 \times 3 = 9$	$3 \times 2 = 6 \quad \text{(M1)}$										
$9 \times 4 = 36$	$6 - 2 = \underline{4} \quad \text{[A1]}$										
$6 \times 6 = 36 \text{ (M1)}$											
$6 - 2 = \underline{4} \text{ (A1)}$											
29)	Dot B										
30)	<p>Pattern 5</p> $5 + 4 + 3 + 2 + 1 = 15 \text{ (M1)}$ $15 \times 3 = \underline{45}$ matches (A1)										
31)	$5\frac{6}{9} \text{ (M1)} = 5\frac{2}{3} \text{ (A1)}$										
32)	$5 - \frac{5}{8} - 1\frac{1}{2}$ $= 3\frac{11}{8} - 1\frac{4}{8}$										

	$= 2\frac{7}{8}$ or $\frac{23}{8}$ [A2] *Any equivalent (M1)
33)	$10 + 7 = \underline{17}$ [M1, A1]
34)	<p><b>Method 1</b></p> $\frac{4}{5} \times 600 = 480$ $1 - \frac{3}{8} = \frac{5}{8}$ $\frac{5}{8} \times 480 = 300 \quad [M1, A1]$ <p>or <math>480 \div 8 \times 5 = \underline{300}</math></p> <p><b>Method 2</b></p>  <p>10 units <math>\rightarrow</math> 600  5 units <math>\rightarrow 600 \div 2 = 300</math> [M1, A1]</p>
35)	$30 \div 3 = 10$ [M1] $5 \times 10 = \underline{50}$ [A1]

**Section C:**

3m each: Q36 – Q38

4m each: Q39 – Q42 mn

5m each: Q43, 44

36)  $372 \div 4 = 93$  (M1)

$93 + 42 = 135$  (M1, A1)

**Alternative method:**

$42 \times 4 = 168$

$372 - 168 = 204$

$204 \div 4 = 51$

$51 + 42 + 42 = 135$

37) (a) Rick saved in one day  $\rightarrow 24 \div 4 = 6$

Peter saved in one day  $\rightarrow 48 \div 6 = 8$

Difference  $\rightarrow \$8 - \$6 = \$2$  (M1, A1)

(b)  $100 \div 2 = 50$  days (M1, A1)

38)  $4 + 2 = 6$

$6 + 4 = 10$  [M1]

$60 \div 10 = 6$  [M1]

$6 \times 6 = \underline{36}$  [A1]

Listing method

Correct start (M1)

Reach final step (M1)

Correct Ans (A1)

39)  $\frac{1}{5} \times 10\text{kg} = 2\text{kg}$  [M1]

$10\text{kg} - 2\text{kg} - 3\frac{1}{2}\text{kg} = 4\frac{1}{2}\text{kg}$  [M1, A1]

**Alternative method 1 & 2**

$1 - \frac{1}{5} = \frac{4}{5}$  [M1] OR  $\frac{4}{5} \times 10\text{kg} = 8\text{kg}$  (M1)

$\frac{4}{5} \times 10\text{kg} = 8\text{kg}$  [M1]  $8\text{kg} - 3\frac{1}{2}\text{kg} = 4\frac{1}{2}\text{kg}$  (M1, A1)

$8\text{kg} - 3\frac{1}{2}\text{kg} = 4\frac{1}{2}\text{kg}$  [A1]

**Alternative method 3:**

$$10 \div 5 = 2 \text{ (M1)}$$

$$10 - 2 - 3\frac{1}{2} = 4\frac{1}{2} \text{ (M1, A1)}$$

40) (a) **Method 1**

$$25 \div 5 = 5 \text{ (M1)}$$

$$14 \times 5 = \underline{70} \text{ (M1, A1)}$$

(b)  $5 \times 10 = \underline{50 \text{ cm}^2}$  (A1)

**Method 2**

$$5 \times 2 = 10 \text{ (M1)}$$

$$25 + 10 + 25 + 10 = \underline{70} \text{ (M1, A1)}$$

41)  $2 \text{ kg } 50\text{g} - 30\text{g} = 2 \text{ kg } 20\text{g}$  (M1)

$$2 \text{ kg } 20\text{g} + 550\text{g} = 2\text{kg } 570\text{g} \text{ (M1)}$$

$$2 \text{ kg } 50\text{g} + 2 \text{ kg } 20\text{g} + 2\text{kg } 570\text{g} = \underline{6\text{kg } 640\text{g} (6640\text{g})}$$
 (M1, A1)

Or

$$2050\text{g} - 30\text{g} = 2020\text{g} \text{ (M1)}$$

$$2020\text{g} + 550\text{g} = 2570\text{g} \text{ (M1)}$$

$$2050\text{g} + 2020\text{g} + 2570 = \underline{6640\text{g} / 6\text{kg } 640\text{g}}$$
 (M1, A1)

$$2\text{kg}50\text{g} \rightarrow 250\text{g}$$

follow through mistake- award method marks accordingly

42) (a)  $125 \times 3 = 375$  (A1)

(b)  $125 + 375 = 500$

$$500 - 50 = 450 \text{ (M1)}$$

$$450 \div 2 = 225 \text{ (M1)}$$

$$225 - 125 = 100 \text{ (A1)}$$

**OR**

$$375 - 50 = 325 \text{ (M1)}$$

$$325 - 125 = 200 \text{ (M1)}$$

$$200 \div 2 = 100 \text{ (A1)}$$

**OR**

$$375 - 125 = 250 \text{ (M1)}$$

$$250 - 50 = 200 \text{ (M1)}$$

$$200 \div 2 = 100 \text{ (A1)}$$

OR

$$125 \times 2 = 250 \text{ (M1)}$$

$$250 - 50 = 200 \text{ (M1)}$$

$$200 \div 2 = 100 \text{ (A1)}$$

OR

$$125 + 50 = 175 \text{ (M1)}$$

$$375 - 175 = 200 \text{ (M1)}$$

$$200 \div 2 = 100 \text{ (A1)}$$

43)  $19 \times 5 = 95$

$95 + 15 = 110$  (M1) } Or  $95 + 15 + 76 = 186$  (M2)

$110 + 76 = 186$  (M1)

$186 \div 3 = 62$  (M1)

$62 \times 4 = 248$  /  $186 + 62 = 248$  (M1, A1)

44) a)  $3\text{m} \times 3\text{m} = 9\text{m}^2$  [M1]

b) shaded square D  $\rightarrow 4\text{m} \times 4\text{m} = 16\text{m}^2$

shaded area of QRST  $\rightarrow 16\text{m} + 2 \times 3 = 24\text{m}^2$

TS  $\rightarrow (24 \times 2)\text{m} + 8\text{m} = 6\text{m}$

$$\text{Total PRSU} \rightarrow (6+8)\text{m} \times 8\text{m} = 112 \text{ m}^2 \quad [\text{M1}]$$

$$\text{Total area of shaded parts} \rightarrow 9 \text{ m}^2 + 16 \text{ m}^2 + 24 \text{ m}^2 = 49 \text{ m}^2 \quad [\text{M1}]$$

$$\text{Total unshaded area} \rightarrow 112 \text{ m}^2 - 49 \text{ m}^2 = 63 \text{ m}^2 \quad [\text{M1, A1}]$$

**Alternative method:**

$$\begin{aligned} \text{shaded area of QRST} &\rightarrow 4\text{m} \times 4\text{m} = 16 \text{ m}^2 \\ &16 \text{ m}^2 \div 2 \times 3 = 24\text{m}^2 \end{aligned}$$

$$\text{Total square PQTU} \rightarrow 8\text{m} \times 8\text{m} = 64 \text{ m}^2 \quad [\text{M1}]$$

$$\text{Shaded area in PQTU} \rightarrow 64 \text{ m}^2 - 9 \text{ m}^2 - 16 \text{ m}^2 = 39 \text{ m}^2 \quad [\text{M1}]$$

$$39 \text{ m}^2 + 24 \text{ m}^2 = 63 \text{ m}^2 \quad [\text{M1, A1}]$$

**Method 3**

$$16 \text{ m}^2 \div 2 \times 3 = 24\text{m}^2$$

$$4 \times 4 = 16$$

$$16 + 3 = 19$$

$$19 \times 2 = 38$$

$$38 + 24 + 1 = 63$$

**Method 4**

$$1 \times 3 = 3$$

$$4 \times 4 = 16$$

$$3 \times 2 = 6$$

$$16 + 3 = 19$$

$$19 \times 2 = 38$$

$$16 \div 2 = 8$$

$$8 \times 3 = 24$$

$$38 + 24 + 1 = 63$$

The total unshaded area is  $63 \text{ m}^2$