2016 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5

PAPER 1
(BOOKLET A)

Total Time for Booklets A and B: 50 min

You are not allowed to use a calculator.

Booklet A:
Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each of the questions, four options are given. One of them is the correct answer. Choose the correct answer (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet provided.

(20 marks)

1. In 4 080 101, what does the digit '8' stand for?

   (1) 800 000
   (2) 80 000
   (3) 8000
   (4) 800

2. Round off 43 507 to the nearest thousand.

   (1) 43 000
   (2) 43 500
   (3) 44 000
   (4) 44 500

3. $30 - 2 \times 4 \div 24 \div 4 =$ _____

   (1) 16
   (2) 22
   (3) 28
   (4) 34

4. How many sixths are there in $3\frac{5}{6}$?

   (1) 5
   (2) 15
   (3) 18
   (4) 23

(Go on to the next page)

5. $\frac{3}{7} \div 6$ is the same as _____ .

(1) $\frac{3}{7} \times \frac{1}{6}$

(2) $\frac{3}{7} \times \frac{6}{1}$

(3) $\frac{7}{3} \times \frac{1}{6}$

(4) $\frac{7}{3} \times \frac{6}{1}$

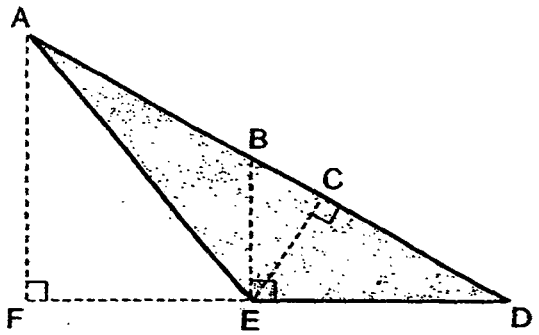
6. Given that ED is the base of the triangle AED, what is its height?

(1) AF

(2) AE

(3) BE

(4) CE



7. Max had 78 beads. He packed them equally into 6 boxes and then gave away 4 of the boxes. How many beads did he give away?

Which one of the following expressions correctly describes the statement above?

(1) 78 ÷ 6 – 4
(2) 78 ÷ (6 – 4)
(3) 78 ÷ (6 x 4)
(4) 78 ÷ 6 x 4

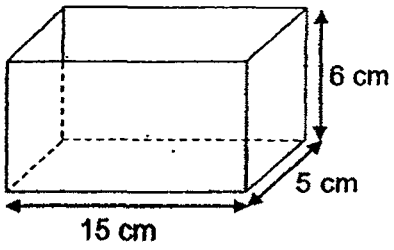
(Go on to the next page)

8. Beng Huat painted $\frac{2}{3}$ of a stick. What is the ratio of the unpainted portion of the stick to the painted portion of the stick?

(1) 1 : 2
(2) 1 : 3
(3) 2 : 1
(4) 2 : 3

9. Find the volume of the cuboid shown below.

(1) 180 cm^3
(2) 390 cm^3
(3) 450 cm^3
(4) 540 cm^3

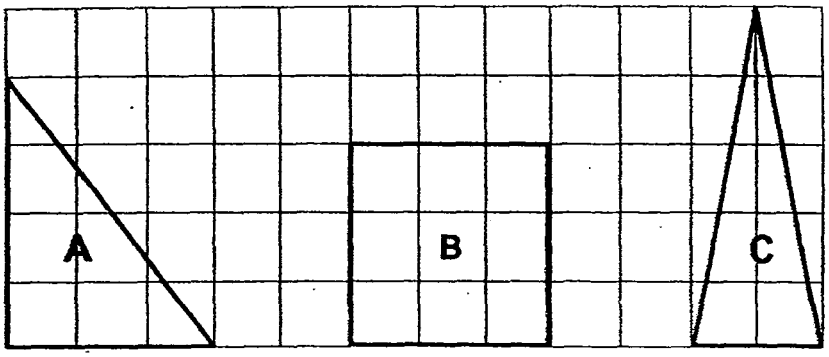


10. Which of the following is the same as 5 060 mℓ?

(1) 5 ℓ 6 mℓ
(2) 5 ℓ 60 mℓ
(3) 50 ℓ 6 mℓ
(4) 50 ℓ 60 mℓ

(Go on to the next page)

11. In the square grid below, A is a right-angled triangle, B is a square and C is an isosceles triangle. Arrange A, B and C from the largest area to the smallest area.



	Largest		Smallest
(1)	A,	B,	C
(2)	B,	A,	C
(3)	B,	C,	A
(4)	C,	A,	B

12. Jenny and Meiling shared $96 between them. Jenny received $80. Find the ratio of Meiling's share to Jenny's share.

(1) 6 : 1
(2) 5 : 1
(3) 1 : 6
(4) 1 : 5

13. A bag contains 12 identical marbles. A few marbles are taken out from the bag. Which of the following is a possible ratio of the number of marbles remaining in the bag to the number of marbles taken out from the bag?

(1) 7 : 1
(2) 6 : 1
(3) 5 : 1
(4) 4 : 1

(Go on to the next page)

14. Jessie used $\frac{3}{4}$ m of ribbon to tie a parcel.

The length of ribbon Kai Ling used to tie another parcel was $\frac{2}{3}$ as long as the length of ribbon Jessie used. What was the total length of ribbon used by both Jessie and Kai Ling?

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

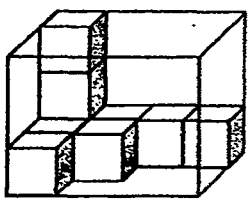
(2) $\frac{5}{7}$ m

(3) $1\frac{1}{4}$ m

(4) $1\frac{5}{12}$ m

15. How many **more** cubes are needed to fill the clear rectangular tank completely?

(1) 28
(2) 27
(3) 15
(4) 9



(Go on to Booklet B)

2016 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5

PAPER 1
(BOOKLET B)

Total Time for Booklets A and B: 50 min

You are not allowed to use a calculator.

Booklet B:
Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated.

(10 marks)

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16. When Karen rounded off a number to the nearest thousand, the result was 4000. What was the smallest possible 4-digit number that Karen had rounded off?

Do not write in this space

Ans: _____

17. Find the missing number in the box below.

$900\,000 + \boxed{\ ?\ } + 40 + 2 = 901\,742$

Ans: _____

(Go on to the next page)

18. What is the ~~reminder~~ remainder when 180 is divided by 40?

Ans: _____

19. Express 6.35 as a mixed number in its simplest form.

Ans: _____

(Go on to the next page)

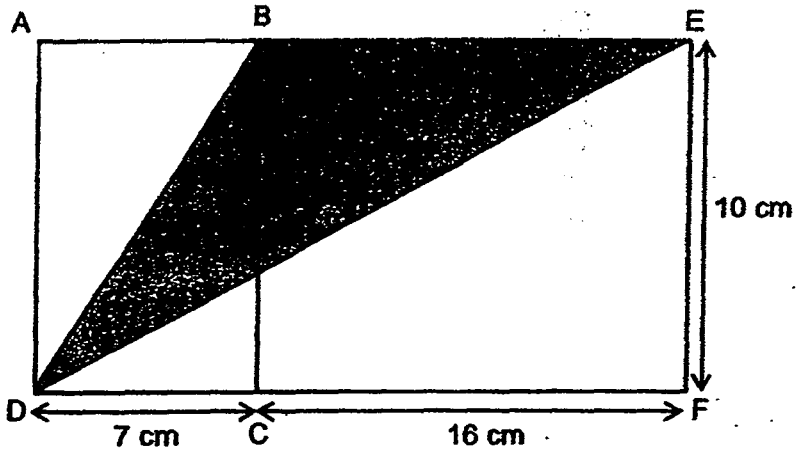
Do not write in this space

20. Find the value of $8\frac{4}{7} - 5\frac{1}{2}$.
Give your answer in the simplest form.

Do not write in this space

Ans: _____

21. 2 rectangles, ABCD and BEFC were placed side by side to form a larger rectangle as shown below. Find the area of the shaded triangle BED.



Ans: _____ cm^2

(Go on to the next page)

22. What is the missing number in the box?

$4 : 6 = 12 : \boxed{?}$

Ans: _____

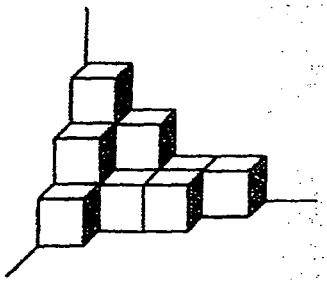
Do not write in this space

23. The sides of a triangle are in the ratio 5 : 2 : 3. The length of the longest side is 20 cm. Find the length of the shortest side of the triangle.

Ans: _____ cm

(Go on to the next page)

24. The solid below is made up of 1-cm cubes. What is the volume of the solid?



Ans: _____ cm^3

25. Find the volume of a 4-cm cube.

Ans: _____ cm^3

Do not write in this space

(Go on to the next page)

Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

Do not write in this space

26. The table shows the charges of a magic show performance.

First 2 hours	$100 per hour
Every additional hour or part thereof	$40

Miss Chan paid the magician $280 for a performance. What was the maximum number of hours the magician could have performed?

Ans: _____ h

27. 3 girls shared some stickers in the ratio of 1 : 2 : 4. They received a total of 56 stickers. How many stickers did the girl with the most number of stickers receive?

Ans: _____

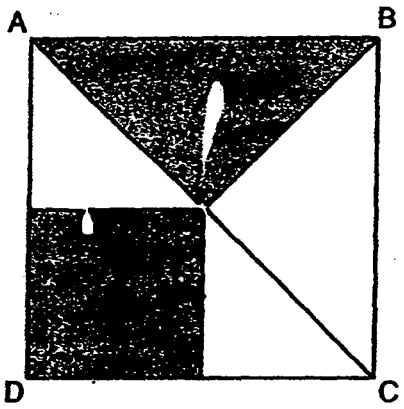
(Go on to the next page)

28. What is the maximum number of 2-cm cubes that can be packed into a container measuring 10 cm by 9 cm by 4 cm?

Do not write in this space

Ans: _____

29. A square ABCD is made up of 1 small square, 2 identical small triangles and 2 identical large triangles. What fraction of the square ABCD is shaded?



Ans: _____

(Go on to the next page)

30. The diagram below shows a pattern of isosceles right-angled triangles.

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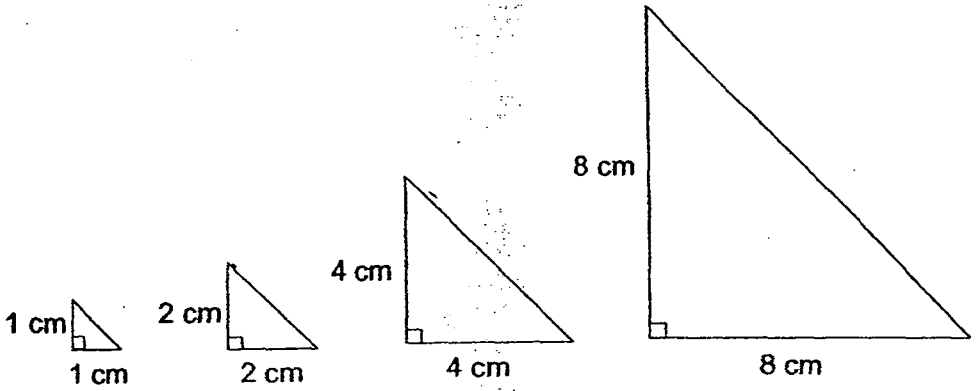

1st triangle | 2nd triangle | 3rd triangle | 4th triangle

What is the area of the 5th triangle in the pattern?

Ans: _____ cm^2

2016 SEMESTRAL EXAMINATION 1
MATHEMATICS
PRIMARY 5

PAPER 2

Time for Paper 2: 1 h 40 min

You are allowed to use a calculator.

Questions 1 to 5 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the space provided. For questions which require units, give your answers in the units stated.

(10 marks)

Do not write in this space

1. Bobby had some marbles. He gave $\frac{1}{3}$ of his marbles to Ken and $\frac{5}{6}$ of the remainder to Wendy. He had 78 marbles left. How many marbles did he give to Ken?

Ans: _____

2. When Carrie feeds her bird 13 seeds a day from a tin of seeds, that tin will last for 30 days. How many days will the same tin of seeds last when she feeds her bird 5 seeds a day instead?

Ans: _____

(Go on to the next page)

3. A tank measuring 20 cm by 15 cm by 12 cm is $\frac{3}{10}$ filled with water. Find the volume of water in the tank.

Do not write in this space

Ans: _____ cm^3

4. Charles and Denny receive the same amount of salary every month. Charles saves $\frac{1}{3}$ of his salary while Denny saves $\frac{2}{5}$ of his salary. Charles saves $160 less than Denny every month. How much is Denny's monthly salary?

Ans: $_____

(Go on to the next page)

5. A bag contains blue and green marbles in the ratio of 2 : 5.
There is a total of 91 marbles in the bag.
How many **more** blue marbles must be added into the bag so that the number of blue marbles will be the same as the number of green marbles?

Do not write in this space

Ans: _____

(Go on to the next page)

For questions 6 to 18, show your working clearly in the space provided for 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.

(50 marks)

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6. A teacher baked some cookies for his class party. When he gave each child 5 cookies, there would be 40 cookies left. When he gave each child 7 cookies, there would be 8 cookies left.

   (a) How many children were there at the class party?
   (b) How many cookies did the teacher bake for the party?

Do not write in this space

Ans: (a)_____ [3]

(b)_____ [1]

(Go on to the next page)

7. Arissa paid $675 for 2 tables and 3 stools. The price of a table was thrice the price of a stool. How much did Arissa pay for the 2 tables?

Do not write in this space

Ans: _____ [3]

8. A packet of rice has a mass of $4\frac{3}{5}$ kg. Its mass is $1\frac{1}{3}$ kg more than a packet of flour. What is the total mass of the packets of rice and flour?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

9. Timothy had a total of 430 red and blue balloons. After giving away $\frac{5}{9}$ of the red balloons and 66 blue balloons, there was an equal number of red and blue balloons left. How many red balloons did he have at first?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

10. Rectangle WXYZ below is made up of 3 identical squares. Given that the perimeter of rectangle WXYZ is 80 cm, find the total area of the unshaded parts.

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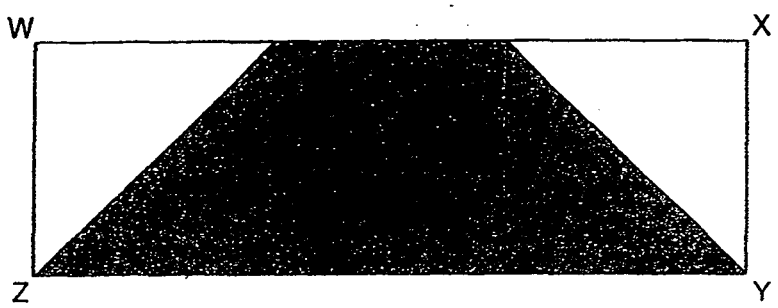


Ans: _____ [3]

(Go on to the next page)

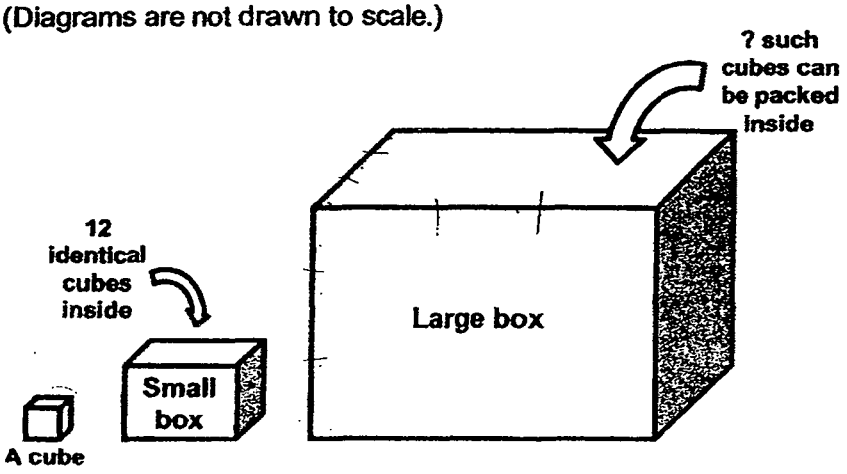
11. A factory had 168 workers at first. The ratio of the number of male workers to the number of female workers was 2 : 1. After 24 female workers left the factory, what was the ratio of the number of male workers to the number of female workers remaining in the factory?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

12. Min Lee has two rectangular boxes of different sizes.
The length, breadth and height of the large box are thrice those of the small box. She packed 12 identical cubes exactly into the small box.
How many such cubes can be packed exactly into the large box?
(Diagrams are not drawn to scale.)



Do not write in this space

Ans: _____ [3]

(Go on to the next page)

13. The table below shows how much Eva saves daily. For each subsequent day, she saves $5 more than the previous day.

Day	Savings
1	$15
2	$20
3	$25
4	$30

(a) How much will Eva save on the Day 6?
(b) On which day will Eva save $80?
(c) How much savings will Eva have **in total** by the day found in part (b)?

Do not write in this space

Ans: (a) _____ [1]

(b) Day _____ [2]

(c) _____ [2]

(Go on to the next page)

14. In a supermarket, a box of biscuits cost $3.50.
For every 10 boxes of biscuits purchased, an additional box of biscuits was given free. Ken made his purchase and left the supermarket with 47 boxes of biscuits. How much did Ken pay in total?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

15. Rui Yin had 3 times as much money as Peter After Rui Yin spent $\frac{1}{2}$ of her money and Peter spent $\frac{3}{5}$ of his money, they had a total of $1615 left.

a) How much money did Rui Yin and Peter have altogether at first?

b) Peter spent $\frac{3}{8}$ of his remaining money on a pair of shoes.
What fraction of his original amount of money did he spend on the pair of shoes?

Do not write in this space

Ans: a) _____ [3]

b) _____ [2]

(Go on to the next page)

16. Triangle ABC and triangle DBC share the same base BC. The height of triangle ABC is 4 times the height of triangle DBC. Given that DE is 4 cm and BC is 13 cm, find the area of the shaded part.

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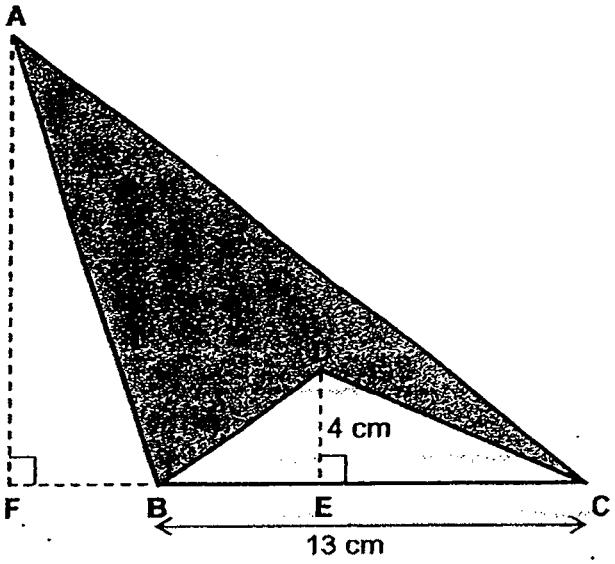

Ans: _____ [4]

(Go on to the next page)

17. There were 207 green pens, 329 red pens, 68 round erasers and some square erasers in a stationery shop. The ratio of the total number of green and red pens to the total number of round and square erasers was 8 : 5. How many square erasers were there in the stationery shop?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

18. A rectangular tank measuring 60 cm by 50 cm by 40 cm was filled with water to a height of 28 cm at first. After 8 completely filled identical jugs of water were poured into the tank, the new water level in the tank became 32 cm.

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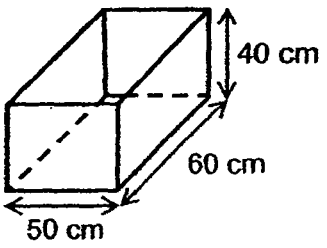
a) Find the volume of water in each jug in cubic centimetres.

b) How much **more** water would be needed to fill the tank completely? (Give your answer in litres.)



Ans:a)_____ [3]

b)_____ [2]

-END OF PAPER-

Setters: Mrs Josephine Lai, Ms Yew Hew Mei, Ms Grace Chan

EXAM PAPER 2016

SCHOOL : HENRY PARK PRIMARY SCHOOL
SUBJECT : PRIMARY 5 MATHEMATICS
TERM : SA1

PAPER 1
Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	3	3	4	1	1	4	1	3	2
Q11	**Q12**	**Q13**	**Q14**	**Q15**					
2	4	3	3	2					

Booklet B

Q16 3500

Q17 1700

Q18 20

Q19 $6\frac{7}{20}$

Q20 $3\frac{1}{14}$

Q21 80

Q22 18

Q23 8

Q24 12

Q25 64

Q26 4

Q27 32

Q28 40

Q29 $\frac{1}{2}$

Q30 128

PAPER 2

Q1 78 X 3 = **234**

Q2 13 X 30 = 390
390 ÷ 5 = **78**

Q3 20 X 15 = 3600
3600 ÷ 10 = 360
360 X 3 = **1080**

Q4 $\frac{1X5}{3X5} = \frac{5}{15}$
$\frac{2X3}{5X3} = \frac{6}{15}$
6 – 5 = 1
1 unit → 160
15 units → 160 x 15 = **2400**

Q5 91 ÷ 7 = 13
13 x 3 = **39**

Q6 (a) 40 – 8 = 32
32 ÷ 2 = **16**
(b) 16 x 5 = 80
80 + 40 = **120**

Q7 675 ÷ 9 = 75
75 x 6 = **450**

Q8 $4\frac{9}{15} - 1\frac{5}{15} = 3\frac{4}{15}$
$4\frac{9}{15} - 3\frac{4}{15} = \mathbf{7\frac{13}{15}}$

Q9 430 – 66 = 364
364 ÷ 12 = 28
28 x 9 = **252**

Q10 80 ÷ 8 = 10
10 x 10 = **100**

Q11 168 ÷ 3 = 56
56 x 2 = 112
56 – 24 = 32
112 : 32 = **7 : 2**

Q12 3 x 3 x 3 = 27 (27 small boxes in the large box)
12 x 27 = **324**

Q13 (a) 30 + 10 = **40**
(b) 80 – 15 = 65
65 ÷ 5 = 13
13 + 1 = **14**
(c) 15 + 20 + 25 + 30 + 35 + 40 + 45 + 50 + 60 + 65 + 70 + 75 + 80 = **665**

Q14 $47 \div 10 = 4$ R 7
4 sets of 10 boxes thus 4 free
$47 - 4 = 43$ (number of boxes purchased)
$43 \times 3.50 =$ **150.50**

Q15

Rui Yin	:	Peter	
3	:	1	
30	:	10	
-15	:	- 6	(spent)
15	:	4	(left)

(a) $15 + 4 = 19$
$1615 \div 19 = 85$
$85 \times 40 =$ **3400**

(b) $85 \times 4 = 340$
$\frac{3}{8} \times 340 = 127.50$
$10 \times 85 = 850$ (at first)
$\frac{127.50}{850} = \frac{3}{20}$

Q16 $4 \times 4 = 16$cm (height if triangle ABC)
$13 \times 4 = 52$
$52 \div 2 = 26$ cm^2 (area of triangle DBC)
$13 \times 16 = 208$
$208 \div 2 = 104$ cm^2 (area of triangle ABC)
$104 - 26 =$ **78cm^2 (area of shaded part)**

Q17 $207 + 329 = 536$ (Green and Red)
$536 \div 8 = 67$
$67 \times 5 = 335$ (Round and square)
$335 - 68 =$ **267**

Q18 (a) $60 \times 50 \times 40 = 120000$
$32 \times 60 \times 50 = 96000$
$120000 - 96000 = 24000$
$2.8 \times 60 \times 50 = 84000$
$96000 - 84000 = 12000$
$12000 \div 8 =$ **1500**

(b) $2400ml = 24l$

END.