

NANYANG PRIMARY SCHOOL
FIRST SEMESTRAL EXAMINATION
2011

PRIMARY 5
MATHEMATICS
PAPER 1

DURATION: 50 MINUTES

Booklet A	/ 20
Booklet B	/ 20

Paper 1 Total:
/ / 40

Name: _____ ()

Class: Primary 5 ()

Date: 13 May 2011

Parent's Signature: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

5034 YOU ARE NOT ALLOWED TO USE A CALCULATOR.

PAPER 1 (BOOKLET A)

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. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1 Express $\frac{4}{25}$ as a decimal.

(1) 0.04

(2) 0.16

(3) 0.4

(4) 1.6

2 Find the value of $\frac{1}{3} + \frac{2}{7}$

(1) $\frac{1}{7}$

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

(3) $\frac{3}{7}$

(4) $\frac{13}{21}$

3 Find the product of $\frac{1}{12}$ and $\frac{9}{2}$.

(1) $\frac{3}{8}$

(2) $\frac{5}{12}$

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

(4) $4\frac{7}{12}$

4 Mrs Tan bought $\frac{1}{3}$ kg of sugar. Her neighbour gave her another $\frac{1}{6}$ kg of sugar. She used $\frac{1}{9}$ kg of it. What fraction of the sugar had she left?

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

(2) $\frac{5}{18}$

(3) $\frac{7}{18}$

(4) $\frac{11}{18}$

- 5 Mrs Lim bought $1\frac{1}{5}$ kg of beef and $2\frac{3}{10}$ kg more chicken than beef.
How much meat did she buy altogether?

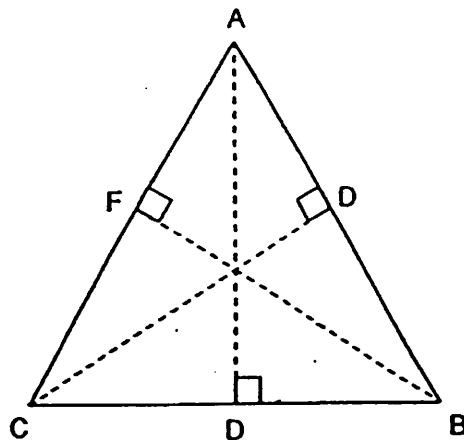
(1) $1\frac{1}{10}$ kg

(2) $3\frac{1}{2}$ kg

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

(4) $4\frac{7}{10}$ kg

- 6 The figure below shows Triangle ABC.



What is the base of Triangle ABC given that the height of the triangle is FB?

- (1) AB
(2) AC
(3) BC
(4) AD

7 Koen is 1 m 55 cm tall and his brother is 10 cm taller. What is the height of Koen's brother?

- (1) 1.065 m
- (2) 1.155 m
- (3) 1.650 m
- (4) 1.551 m

8 Subtract 78 hundredths from the sum of 17.2 and 3.2. Give your answer correct to the nearest tenth.

- (1) 12.6
- (2) 19.6
- (3) 20.3
- (4) 20.4

9 What is the missing number in the box?

$$642\,574 = (6 \times 100\,000) + (40 \times \boxed{?}) + (2 \times 1\,000) + (57 \times 10) + (4 \times 1)$$

- (1) 100
- (2) 1 000
- (3) 10 000
- (4) 100 000

- (4) 10
- (3) 35
- (2) 21
- (1) 15

$$(7 \times 6 + 3) \div 9 \times (105 + \boxed{?}) = 35$$

12 What is the missing number in the number statement below?

- (4) \$4
- (3) \$8
- (2) \$25
- (1) \$80

11 Longans were sold at \$0.50 per 50 g at a fruit stall. What was the price of 8 kg of longans?

- (4) 60
- (3) 54
- (2) 52
- (1) 13

10 Find the value of $6 + (52 + 20) \div 3 \times 2$.

13 Rani read 10 pages of a storybook on the first day. Each day, she read 2 more pages than the previous day for the next 5 days. How many pages of the storybook did she read altogether for the 6 days?

(1) 20

(2) 60

(3) 70

(4) 90

14 It takes 3 cleaners $\frac{2}{9}$ h to clean an office. How long do 5 cleaners take to clean the same office, assuming every cleaner clean at the same rate?

(1) $\frac{2}{3}$ h

(2) $\frac{2}{15}$ h

(3) $\frac{2}{27}$ h

(4) $\frac{10}{27}$ h

- 15 Sulin has a picture measuring $5\frac{1}{5}$ cm by 5 cm. She wants to paste the picture on a cardboard leaving a border of 2 cm around the picture. What is the area of the border?

(1) $56\frac{4}{5}$ cm²

(2) $50\frac{2}{5}$ cm²

(3) $40\frac{4}{5}$ cm²

(4) $24\frac{4}{5}$ cm²

Name: _____ () Class: Pr 5 ()

P5 SA1 2011

PAPER 1 (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)

-
- 16 Write seven thousands, three hundreds, six ones and two tenths in numeral.

Ans: _____

-
- 17 Ravi's friend gave him $\frac{5}{6}$ of a pancake. Ravi ate $\frac{1}{3}$ of what he had received. What fraction of the pancake was left? (Give your answer in its simplest form.)

Ans: _____

- 18 Lucy made 5 jugs of lemonade for her party. Each jug can hold $1\frac{5}{6}$ l of lemonade. How much lemonade did she make? (Give your answer in its simplest form.)

Ans: _____ l

- 19 Find the value of $300 - (36 + 57 \div 3) \times 4$.

Ans: _____

- 20 How many litres are there in 5 l 57 ml?

Ans: _____ l

- 21 What is the missing number in the box?

$$4\frac{1}{4} - \frac{7}{8} = 2\frac{\square}{8}$$

Ans: _____

- 22 Wilbert wants to form a square with some rectangular cards. Each rectangular card measures 6 cm by 4 cm. Find the least number of rectangular cards he needs to form the square.

Ans: _____

- 23 Look at the number statements below.

$$X + \frac{1}{5} = Y$$

$$Y \times 100 = 10\,800$$

Find the value of X. Express your answer as a decimal.

Ans: _____

- 24 Pens are only sold in packets of 5. Each packet is sold at \$3. Gopal has \$22. How many such pens can he buy at most?

Ans: _____

- 25 Find the missing number in the box below.

$$3.6 \times 10 = 3.6 \times 2 + 3.6 + 3.6 + \boxed{?} \times 7.2$$

Ans: _____

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)

-
- 26 Jane has a ribbon which is 5 m long. She used 2 m to tie a present and cut the rest into 7 equal pieces. What is the length of each piece of ribbon left? (Round off your answer to 3 decimal places.)

Ans: _____ m

-
- 27 A carton containing 20 identical bottles of sparkling juice has a total mass of 20.6 kg. Find the mass of each bottle of sparkling juice if the mass of the empty carton is 1 200g.

Ans: _____ kg

-
- 28 A rope was 3 250 cm long. It was cut into equal pieces of length 50 cm each. How many cuts were made?

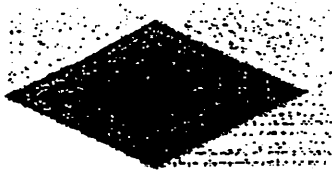
Ans: _____

- 29 Hui Hui had some stickers. She gave 18 stickers to her sister and $\frac{5}{7}$ of the stickers to Mary. Then, she used $\frac{3}{4}$ of the remainder for her project and had 35 stickers left. How many stickers did she have at first?

Ans: _____

- 30 Ali, Bala and Carl shared 90 marbles. If Ali gave 6 marbles to Bala, Bala gave 2 marbles to Carl and after that Carl gave $\frac{1}{4}$ of what he had then to Ali, the three boys will have the same number of marbles in the end. How many more marbles than Ali did Carl have?

Ans: _____



NANYANG PRIMARY SCHOOL
FIRST SEMESTRAL EXAMINATION
2011

PRIMARY 5
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	/ 60
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 5 ()

Date: 13 May 2011

Parent's Signature: _____

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PAPER 2

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 spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

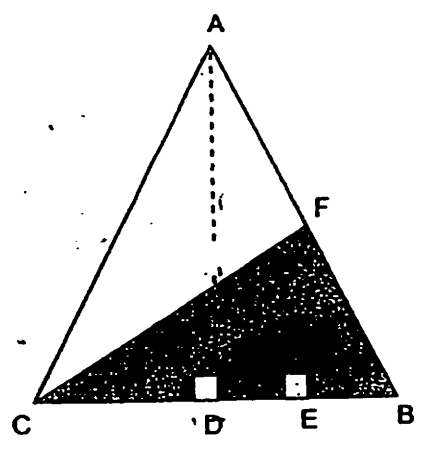
-
- 1 A taxi driver charges \$2.80 for the first km and \$0.20 for every additional 380 m or part thereof. How much must a passenger pay for a journey of 12 km?

Ans: \$ _____

-
- 2 Tap A can fill an empty tank in 5 minutes. When Tap A and Tap B are turned on at the same time, they can fill the empty tank in 3 minutes. How long does it take for Tap B to fill the empty tank?

Ans: _____ min

- 3 The figure below is made of 2 triangles, Triangle ABC and Triangle CBF. AD is 8 cm and FE is 3.5 cm. If the area of Triangle ABC is 48 cm^2 , find the area of Triangle CBF.



Ans: _____ cm^2

4 Observe the statements below carefully.

$$\triangle + \heartsuit + \odot \rightarrow 26$$

$$\triangle - \heartsuit \rightarrow 6$$

$$\odot - \heartsuit \rightarrow 2$$

(a) Insert a pair of brackets, (), in the number statement below to illustrate the correct working order to find the value of \triangle

$$26 - 2 - 6 \div 3 + 6 \quad [1]$$

(b) What is the value of \triangle ?

Ans: (b) _____ [1]

5 Kai Xin jogged $12\frac{3}{10}$ km in total from Monday to Thursday. Each day, she jogged 200 m less than the previous day. How many kilometres did she jog on Monday?

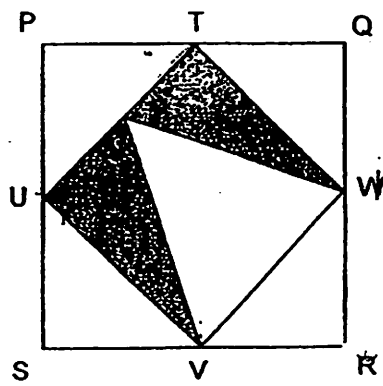
Ans: _____ km

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)

- 6 The figure below shows Square PQRS with side 13 cm. T and W are the midpoints of PQ and QR respectively. U and V are the midpoints of PS and RS respectively. Find the total area of the shaded parts.



Ans: _____ [3]

- 7 Weiming and Kate have 105 stamps altogether. $\frac{2}{5}$ of the number of stamps Weiming has is the same as $\frac{1}{8}$ of the number of stamps Kate has. How many more stamps than Weiming does Kate have?

Ans: _____ [3]

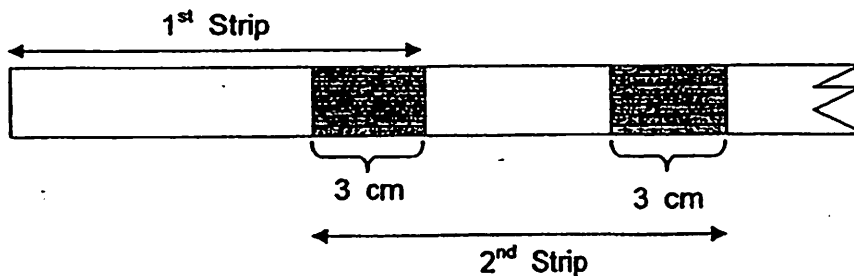
- 8 Mr Rajah is 30 years older than Muthu. 5 years from now, Muthu will be $\frac{1}{3}$ of Mr Rajah's age while Devi will be $\frac{3}{5}$ of Muthu's age. Express Devi's present age as a fraction of Mr Rajah's present age. Leave your answer in its simplest form.

Ans: _____ [3]

- 9 Mrs Sim baked 84 strawberry cakes and chocolate cakes altogether. She sold the strawberry cakes at \$6 each and the chocolate cakes at \$8 each. She earned \$554 when she sold all the cakes. How many chocolate cakes did she bake?

Ans: _____ [3]

- 10 12 similar strips of paper were glued to form a new long strip of paper of length 135 cm. The first strip and the second strip were glued together to form an overlapped area of 3 cm as shown in the diagram below. This was consistent for the rest of the remaining strips of paper. Find the length of each original strip of paper.



Ans: _____ [3]

11 Aminah shared the cost of a party with 5 friends. She paid 0.25 of the bill and her friends shared the remaining of the bill equally. Each friend paid \$12 less than Aminah.

(a) How much did Aminah pay for the party?

(b) What was the total bill?

Ans: (a) _____ [3]

(b) _____ [1]

12 A shopkeeper had 670 red and blue balloons. She sold $\frac{1}{4}$ of the red balloons and bought another 50 blue balloons. Now, the number of blue balloons is $\frac{1}{6}$ of the number of red balloons.

- (a) How many blue balloons does the shopkeeper have now?
- (b) How many more red balloons than blue balloons did the shopkeeper have at first?

Ans: (a) _____ [3]

(b) _____ [1]

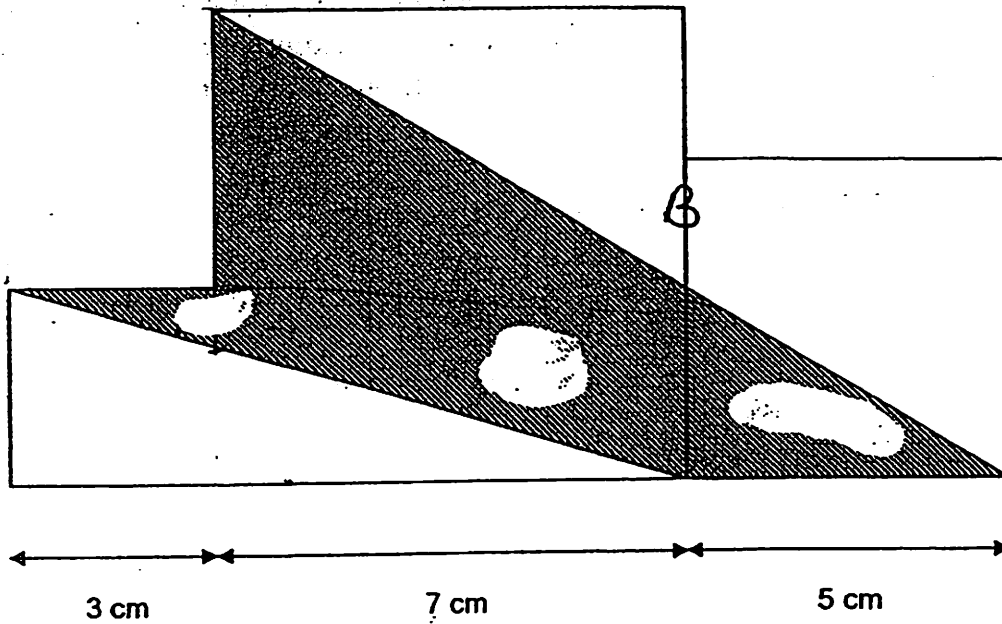
13 There was a total of 225 counters in Bags A, B, C and D. 15 counters from Bag A were given away, 24 counters were added to Bag B, half of the counters in Bag C were sold and the number of counters in Bag D was doubled. As a result, there was an equal number of counters in each bag.

- (a) Find the number of counters in Bag B at first.
- (b) How many more counters were there in Bag C than Bag D at first?

Ans: (a) _____ [3]

(b) _____ [1]

- 14 The figure below is made up of 3 squares of sides 3 cm, 7 cm and 5 cm respectively. Find the area of the shaded part.



Ans: _____ [4]

- 15 17 identical rectangular tiles are arranged to form a bigger rectangle as shown below. The shaded parts are the gaps that are formed after the arrangement. If the perimeter of the bigger rectangle is 264 cm, find the total area of the shaded parts.

Ans: _____ [4]

16 Mandy had some money. After spending \$31 on 5 notebooks and 8 files, she was short of \$0.40 if she were to buy another notebook. However, she would have \$0.60 left if she were to buy one more file.

- (a) How much did a notebook cost?
- (b) How much money did Mandy have?

Ans: (a) _____ [3]

(b) _____ [2]

- 17 There were 800 people at a party. $\frac{3}{8}$ of them were women and the rest were men. After 1 hour, some men left the party and the number of men became $\frac{2}{5}$ of the number of the remaining people. Another 15 minutes later, some women left the party and the number of men remaining at the party was $\frac{5}{7}$ of the number of people who were still at the party. How many people were still at the party?

Ans: _____ [5]

- 18 Mr Zaini has a carton containing some red and green apples. If he adds in 10 red apples, 0.6 of the number of apples in the carton will be green apples. If he adds in 30 green apples, $\frac{3}{4}$ of the number of apples in the carton will be green apples. How many apples are there in the carton?

Ans: _____ [5]

END OF PAPER.

ANSWER SHEET

EXAM PAPER 2011

SCHOOL : NANYANG
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1

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

- 16) 7306.2 17) $5/9$ 18) $9\frac{1}{6}$ 19) 80 20) 5.057
 21) 11 22) 6 23) 107.8 24) 35 25) 3
 26) 0.429m 27) 0.97kg 28) 64 cuts 29) 553 stickers 30) 12

Paper 2

- 1) $12\text{km} - 1\text{km} = 11\text{km}$
 $11\text{km} \rightarrow 11000\text{m}$
 $11000\text{m} + 380\text{m} = 28\frac{18}{19}$
 ≈ 29
 $\$0.20 \times 29 + \$2.80 = \$8.60$

2) $1/3 - 1/5 = 2/15$
 $1 \div 2/15 = 7\frac{1}{2}\text{min}$

- 3) $1/2 \times 8\text{cm} = 4\text{cm}$
 $48\text{cm} \div 4\text{cm} = 12\text{cm}$
 CB $\rightarrow 12\text{cm}$
 Triangle CBF $\rightarrow 1/2 \times 12\text{cm} \times 3.5\text{cm}$
 $= 21\text{cm}^2$

4) a) $(26 - 2 - 6) \div 3 + 6$
 b) $18 \div 3 = 6$
 $6 + 6 = 12$

- 5) $200\text{m} \times 6 = 1200\text{m}$
 $12300\text{m} - 1200\text{m} = 11100\text{m}$
 $11100\text{m} \div 4 = 2775\text{m}$
 $200\text{m} \times 3 = 600\text{m}$
 $2775\text{m} + 600\text{m} = 3375\text{m}$
 $= 3.375\text{km}$

- 6) $13\text{cm} \div 2 = 6.5\text{cm}$
 One small triangle $\rightarrow 1/2 \times 6.5\text{cm} \times 6.5\text{cm}$
 $= 21.125\text{cm}^2$
 Area of square $\rightarrow 169\text{cm}^2$
 Four small triangle $\rightarrow 21.125\text{cm}^2 \times 4$
 $= 84.5\text{cm}^2$
 $169\text{cm}^2 - 84.5\text{cm}^2 = 84.5\text{cm}^2$
 $84.5\text{cm}^2 \div 2 = 42.25\text{cm}^2$

- 7) 1 unit $\rightarrow 105 \div 21 = 5$
 W $\rightarrow 5 \times 5 = 25$
 K $\rightarrow 16 \times 5 = 80$
 $80 - 25 = 55$ stamps

- 8) $30 \div 2 = 15$ (M, 5 years later)
 $3/5 \times 15 = (D, 5 years later)$
 $\frac{9-5}{45-5} = \frac{4}{40} = \frac{1}{10}$

- 9) $84 \times \$6 = \504

- 10) $11 \times 3\text{cm} = 33\text{cm}$

$$\begin{aligned} \$554 - \$504 &= \$50 \\ \$8 - \$6 &= \$2 \\ \$50 \div 2 &= \$25 \end{aligned}$$

$$\begin{aligned} 135\text{cm} + 33\text{cm} &= 168\text{cm} \\ 168\text{cm} \div 12 &= 14\text{cm} \end{aligned}$$

$$\begin{aligned} 11)\text{a)} &0.25 \rightarrow \frac{1}{4} \\ &4 \rightarrow \frac{1}{4} \text{ (Aminah paid)} \\ &4 \rightarrow \frac{3}{4} \\ &\frac{3}{4} \div 5 = 0.15 \\ &0.25 - 0.15 = 0.1 \\ &0.1 \rightarrow \$12 \\ &0.1 \times 2.5 = 0.25 \\ &\text{Aminah's bill} \rightarrow \$12 \times 2.5 = \$30 \\ \text{b)} &0.1 \times 1.5 = 0.15 \\ &\text{Friend's bill} \rightarrow 1.5 \times \$12 = \$18 \\ &\$18 \times 5 = \$90 \\ &\$90 + \$30 = \$120 \end{aligned}$$

$$\begin{aligned} 12)\text{a)} &670 + 50 = 720 \\ &720 \div 9 = 80 \text{ blue balloons} \\ \text{b)} &80 - 50 = 30 \\ &80 \times 8 = 640 \\ &640 - 30 = 610 \text{ red balloons} \end{aligned}$$

$$\begin{aligned} 13)\text{a)} &225 + 24 - 15 = 234 \\ &234 \div 9 = 26 \\ &26 \times 2 = 52 \\ &52 - 24 = 28 \\ \text{b)} &26 \times 3 = 78 \end{aligned}$$

$$\begin{aligned} 14) &15 \times 7 = 105 \\ &3 \times 4 = 12 \\ &\frac{1}{2} \times 12/1 \times 7/1 = 42 \\ &\frac{1}{2} \times 10/1 \times 3/1 = 15 \\ &105 - 12 - 15 - 42 = 36\text{cm}^2 \end{aligned}$$

$$\begin{aligned} 16)\text{a)} &1\text{NB costs} \rightarrow (\$0.60 + \$0.40 = \$1), \text{ore than 1F} \\ &8\text{NB} + 5\text{NB} - \$8 = \$31 \\ &13\text{NB} \rightarrow \$31 + \$8 = \$39 \\ &1\text{NB} \rightarrow \$3 \\ \text{b)} &\$31 + \$2 = \$33 \\ &\$33 + \$0.60 = \$33.60 \end{aligned}$$

$$\begin{aligned} 15) &5\text{L} \rightarrow 3\text{B} + 3\text{L} \\ &2\text{L} \rightarrow 3\text{B} \\ &1\text{L} \rightarrow 1.5\text{B} \\ &10\text{L} \rightarrow 15\text{B} \\ &15\text{B} + 7\text{B} = 22\text{B} \\ &22\text{B} \rightarrow 264\text{cm} \\ &1\text{B} \rightarrow 12\text{cm} \\ &1\text{L} \rightarrow 1.5 \times 12\text{cm} = 18\text{cm} \\ &18\text{cm} - 12\text{cm} = 6\text{cm} \\ &6\text{cm} \times 6\text{cm} \times 3 = 108\text{cm}^2 \end{aligned}$$

$$18) 90$$

$$\begin{aligned} 17) &3/8 \times 800 = 300 \\ &5/8 \times 800 = 500 \\ &3/5 \text{ of R1} \rightarrow 300 \\ &2/5 \text{ of R1} \rightarrow 200 \\ &500 - 200 = 300 \\ &5/7 \text{ of R2} = 200 \\ &2/7 \text{ of R2} \rightarrow 80 \\ &200 + 80 = 280 \text{ people} \end{aligned}$$