

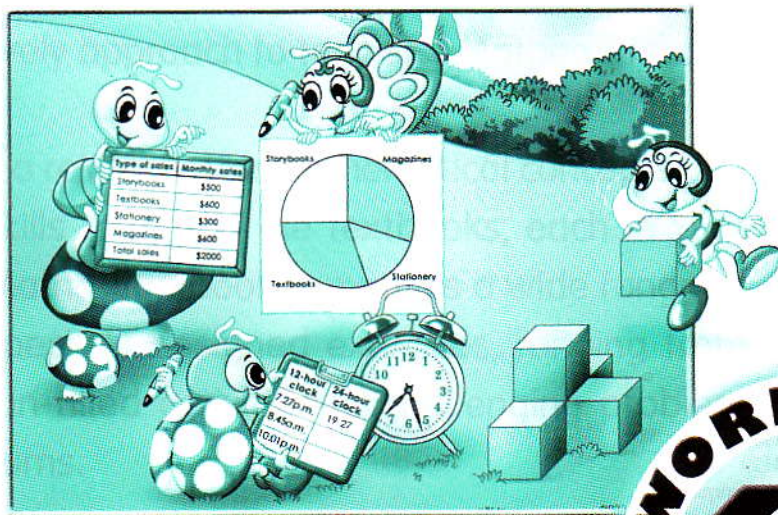
# In Step MATHS



Dr Lai Chee Chong  
 Leong Weng Kee  
 General Editor: Sin Kwai Meng

**WORKBOOK**  
**6A**  
**EM1/2**

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**Part One**

# Preface



**In Step Maths** is a series of textbooks and accompanying workbooks specially written to meet the mathematical needs of primary school pupils.

**T**his series adopts a learner-centred and lively approach to teaching Mathematics.

**T**o reinforce the mathematical concepts and skills taught in the textbooks, each In Step Maths workbook comprises a wide range of specially designed exercises, ranging from fun-filled activities to challenging problem sums.



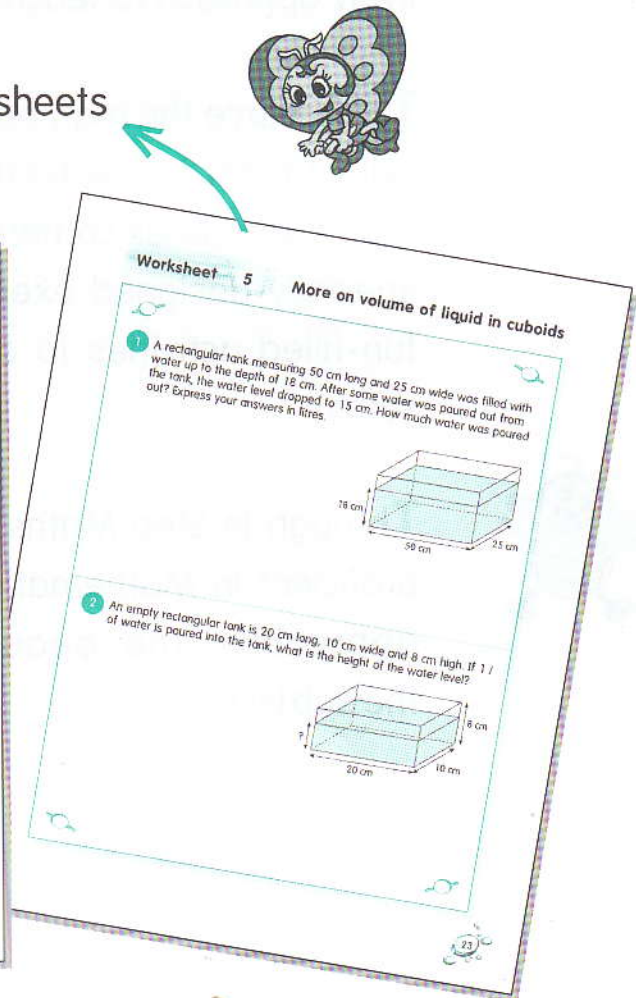
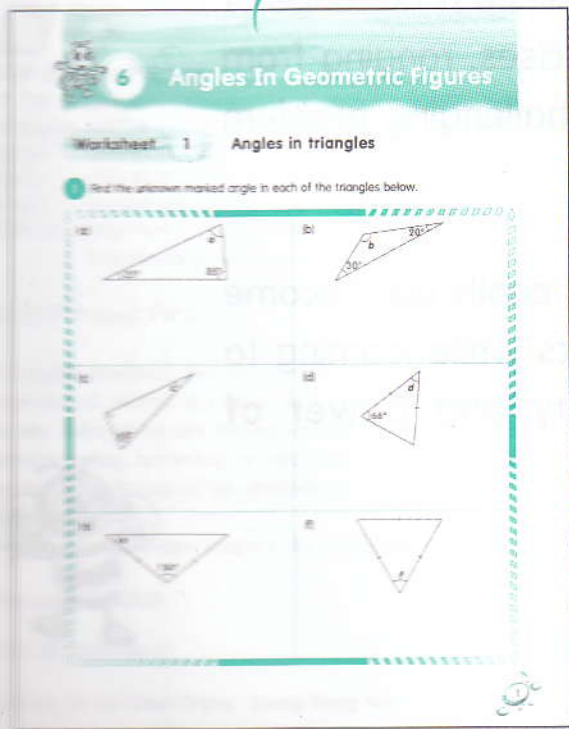
**T**hrough In Step Maths, pupils can become proficient in Mathematics while learning to appreciate the beauty and power of the subject.



# About The Book

This workbook adopts a structured approach in reinforcing the concepts and skills learnt in the textbook. Practice comes in the form of worksheets, skill practices, revision and review papers. Each worksheet focuses on specific skills. A Skill Practice is found at the end of every chapter to consolidate what has been learnt in that chapter. The workbook also contains revision and review papers to provide for further practice and to assess pupils' understanding.

## Worksheets





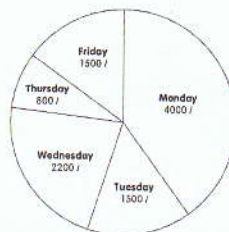
## Skill Practice

**Skill Practice 2**

- Express 95.2 cm as a percentage of 680 cm.
- Express 990 l as a percentage of 360 l.
- What percentage of 55000 is 57230?
- What percentage of 50 kg is 2.5 kg?

## Revision 7

1 The pie chart below shows the amount of water used by a restaurant from Monday to Friday for a certain week.



- On which day did the restaurant use the least amount of water?
- How many litres of water were used from Monday to Friday altogether?
- How many more litres of water did the restaurant use on Friday than on Thursday?
- What was the percentage increase in the amount of water used from Thursday to Friday?

## Revision Paper



## Review Paper



## Review Paper

### Section A

For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write its number in the brackets provided.

- Express  $3\frac{1}{4}\%$  as a decimal.
 

(1) 3.25	(2) 0.0325	( )
(3) 0.325	(4) 325	( )
- Round off 289 316 to the nearest thousand.
 

(1) 290 000	(2) 289 310	( )
(3) 289 300	(4) 289 000	( )
- If the ratios  $A : B = 1 : 4$  and  $B : C = 2 : 5$ , then  $A : B : C =$  \_\_\_\_\_.
 

(1) 1 : 2 : 5	(2) 1 : 4 : 5	( )
(3) 1 : 4 : 10	(4) 2 : 4 : 5	( )
- How many more squares must be shaded so that the shaded area is 55% of the area of the whole rectangle?
 

(1) 4	(2) 5	( )
(3) 6	(4) 7	( )
- A pen cost  $5x$  and a pencil box cost  $33x$ . Jamie bought 5 pens and 2 pencil boxes and paid the cashier \$50. How much change did she get from the cashier?
 

(1) $\$50 - 11x$	(2) $\$50 - 10x$	( )
(3) $\$50 - 8x$	(4) $\$50 - 4x$	( )

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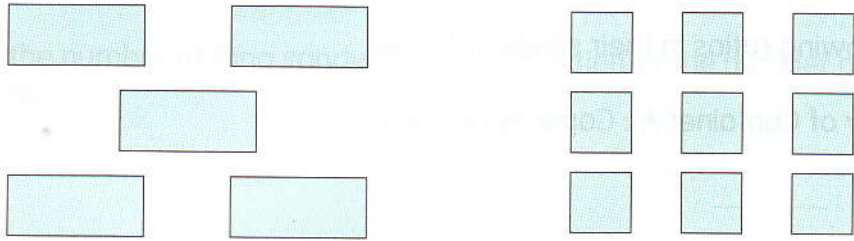
# 1

# Ratio And Direct Proportion

## Worksheet 1 Ratios

1 Fill in the blanks.

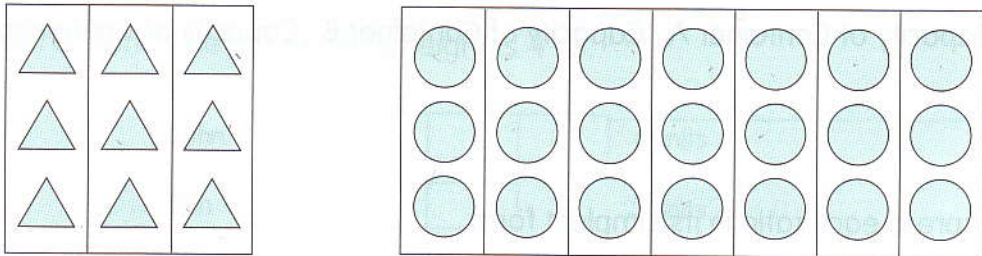
(a)



The ratio of the number of rectangles to the number of squares is \_\_\_\_\_ : \_\_\_\_\_.

The ratio of the number of squares to the number of rectangles is \_\_\_\_\_ : \_\_\_\_\_.

(b)



The ratio of the number of circles to the number of triangles is \_\_\_\_\_ : \_\_\_\_\_.

The ratio of the number of triangles to the number of circles is \_\_\_\_\_ : \_\_\_\_\_.





- 2 The table below shows the capacities of 3 containers.

Container	Capacity (l)
A	9
B	18
C	15

Write the following ratios in their simplest forms.

- (a) Capacity of Container A : Capacity of Container B

\_\_\_\_\_ : \_\_\_\_\_

- (b) Capacity of Container C : Capacity of Container A

\_\_\_\_\_ : \_\_\_\_\_

- (c) Capacity of Container B : Total capacity of the 3 containers

\_\_\_\_\_ : \_\_\_\_\_

- (d) Capacity of Container A : Capacity of Container B : Capacity of Container C

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- 3 Express each ratio in its simplest form.

(a)  $16 : 40 =$  \_\_\_\_\_ : \_\_\_\_\_      (b)  $24 : 54 =$  \_\_\_\_\_ : \_\_\_\_\_

(c)  $12 : 32 : 28 =$  \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

(d)  $63 : 49 : 14 =$  \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_



## Worksheet 2 Ratios and fractions

- 1 Alice made some sandwiches for a picnic. The ratio of the number of tuna sandwiches to the number of chicken sandwiches was 2 : 3.

Tuna sandwiches 

--	--

 2 units

Chicken sandwiches 

--	--	--

 3 units

- (a) Express the number of tuna sandwiches as a fraction of the number of chicken sandwiches.
- (b) Express the number of chicken sandwiches as a fraction of the total number of sandwiches.

- 2 The ratio of John's height to Ken's height is 4 : 3.

John 

--	--	--	--

 4 units

Ken 

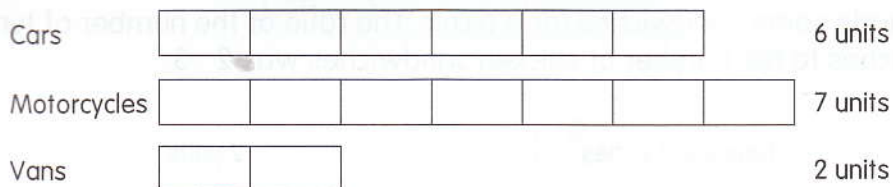
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 3 units

- (a) Express John's height as a fraction of Ken's height.
- (b) Express Ken's height as a fraction of John's height.

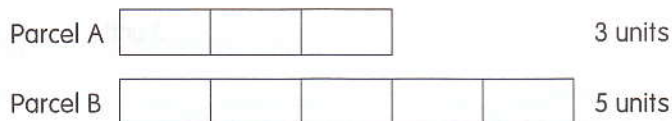


- 3 The ratio of the number of cars to the number of motorcycles to the number of vans in a car park is 6 : 7 : 2.



- (a) Express the number of vans as a fraction of the number of motorcycles.
- (b) Express the number of cars as a fraction of the total number of vehicles.

- 4 The mass of Parcel A is  $\frac{3}{5}$  of the mass of Parcel B. Find the ratio of the mass of Parcel B to the mass of Parcel A.



- 5  $\frac{4}{7}$  of a group of children were girls. Find the ratio of the number of children to the number of girls.

- 6 The number of women is  $\frac{5}{8}$  of the number of adults working in an office. Find the ratio of the number of women to the number of men.

- 1 There are 5 times as many children as adults at an amusement park. What is the ratio of the number of children to the total number of people at the amusement park?

Children 

--	--	--	--	--

 5 units

Adults 

--

 1 unit

- 2 Ailing and Fatimah shared some oranges in the ratio 9 : 3. How many times as many oranges as Fatimah did Ailing have?

Ailing 

--	--	--	--	--	--	--	--	--	--

 9 units

Fatimah 

--	--	--

 3 units



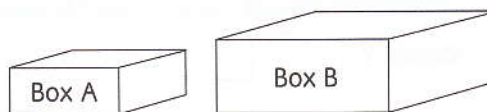
- 3 The lengths of 2 ribbons, X and Y are in the ratio 10 : 2. How many times is Ribbon X as long as Ribbon Y?



- 4 Calvin's savings was  $\frac{9}{4}$  of Peter's savings. What was the ratio of the amount of money saved by Calvin to the amount of money saved by Peter?

5 The mass of Box A is 3 kg. The mass of Box B is 12 kg.

- (a) What is the ratio of the mass of Box A to that of Box B?
- (b) How many times is Box B as heavy as Box A?



6  $\frac{5}{6}$  of Ravi's pocket money is twice as much as Kumar's pocket money. What fraction of Ravi's pocket money is Kumar's pocket money?



## Worksheet 4 Direct proportion

1 Meiling adds 4 cups of water to every cup of rice to cook some porridge.

(a) Complete the table below.

Rice (cups)	1	2	3	
Water (cups)	4			16

(b) Fill in the blanks.

$$1 : 4 = 2 : \underline{\quad} = 3 : \underline{\quad} = \underline{\quad} : 16$$

2 The cost of 4 towels is \$10.

(a) If Rita wants to buy 12 towels, how much does she need?

(b) If Mona has \$50, how many towels can she buy?





- 3 A tailor uses 12 m of cloth to make 8 dresses. How much cloth is needed to make 20 such dresses?

- 4 If the mass of 3 cartons of mangoes is 46.5 kg, find the mass of 9 such cartons of mangoes.



5 A car can travel 144 km on 12 l of petrol.

- (a) How far can the car travel on 8 l of petrol?
- (b) How much petrol is needed to travel 216 km?



6 Bala can wrap 12 parcels in 40 minutes. How many such parcels can he wrap in 1 hour?

- 7 Mary added 12 g of salt to every 6 l of water.
- (a) Find the amount of salt she added to 18 l of water.
- (b) If she added 60 g of salt, how much water did she use?



- 8 Mrs Foo bought 16 apples. She used 4 apples to make 6 similar bowls of fruit salad in the morning. She used the rest of the apples to make some more fruit salad again in the afternoon for a party. How many bowls of fruit salad did she make altogether in the morning and in the afternoon?

# Worksheet 5 More on ratio and direct proportion

- 1 The ratio of the mass of Box X to the mass of Box Y is 7 : 3. The ratio of the mass of Box Y to the mass of Box Z is 6 : 5. Find the ratio of the mass of Box X to the mass of Box Y to the mass of Box Z.

Box X  7 units

Box Y  3 units

Box Y  6 units

Box Z  5 units

- 2 The ratio of the number of John's pencils to the number of Muthu's pencils is 5 : 4. The ratio of the number of Muthu's pencils to the number of Samy's pencils is 1 : 2. Find the ratio of the number of John's pencils to that of Muthu's pencils to that of Samy's pencils.

John 

--	--	--	--	--

 5 units

Muthu 

--	--	--	--

 4 units

Muthu 

--

 1 unit

Samy 

--	--

 2 units

3 The total length of Rod A, Rod B and Rod C is 93 m. The ratio of the length of Rod A to the length of Rod B is 5 : 7. The ratio of the length of Rod B to that of Rod C is 2 : 1.

- (a) Find the ratio of the length of Rod A to the total length of the 3 rods.  
(b) Find the length of Rod A.

Rod A  5 units

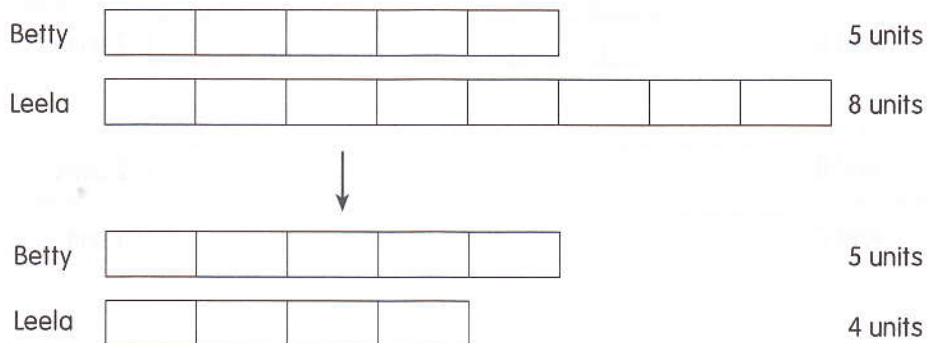
Rod B  7 units

Rod B  2 units

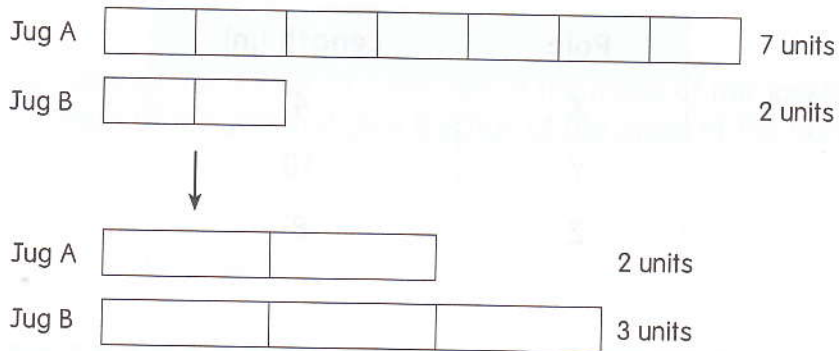
Rod C  1 unit

## Worksheet 6 Changing ratios

- 1 The ratio of Betty's money to Leela's money was 5 : 8. If Leela spent  $\frac{1}{2}$  of her money, what would be the new ratio of Leela's money to the total amount of money left?



- 2 270 ml of water was poured into Jug A and Jug B in the ratio 7 : 2. After transferring some water from Jug A to Jug B, the ratio of the volume of water in Jug A to that in Jug B became 2 : 3. How much water was poured from Jug A to Jug B?





## Skill Practice

1

1 The table below shows the lengths of 3 poles.

Pole	Length (m)
X	4
Y	10
Z	8

Write the following ratios in their simplest forms.

(a) Length of Pole X : Length of Pole Z

\_\_\_\_\_ : \_\_\_\_\_

(b) Length of Pole Y : Length of Pole X

\_\_\_\_\_ : \_\_\_\_\_

(c) Length of Pole Z : Total length of the 3 poles

\_\_\_\_\_ : \_\_\_\_\_

(d) Length of Pole X : Length of Pole Y : Length of Pole Z

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- 2 The ratio of the mass of a durian to the mass of a jackfruit is 5 : 8.

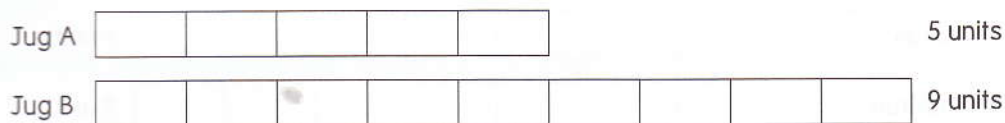


- (a) Express the mass of the durian as a fraction of the mass of the jackfruit.  
(b) Express the mass of the jackfruit as a fraction of the mass of the durian.

- 3 The ratio of the number of men to the number of women to the number of children at a party is 3 : 9 : 4.

- (a) Express the number of children as a fraction of the total number of men and women.  
(b) How many times as many women as men are there?

- 4 The volume of water in Jug A is  $\frac{5}{9}$  of the volume of water in Jug B.



- (a) Express the volume of water in Jug B as a fraction of the volume of water in Jug A.  
(b) Find the ratio of the volume of water in Jug B to the volume of water in Jug A.

- 5  $\frac{1}{4}$  of the mass of Basket X is twice as much as the mass of Basket Y. What is the ratio of the mass of Basket X to the mass of Basket Y?

6 In an outdoor activity, there are 5 girls to every 2 boys. If there are 50 boys, how many girls are there?

7 The height of a stack of 6 identical books is 57 cm.

- (a) What will be the height of a stack of 15 such books?
- (b) How many books will make a stack 171 cm high?

8 For every \$12 Jim saves, his brother saves \$7. If his brother saves \$315, how much will Jim save?

9 A farmer sold 6 eggs for \$1.20. He sold 18 eggs to one customer and 28 eggs to another customer. How much money did he collect altogether from the 2 customers?

10 The ratio of the area of Field A to that of Field B is 3 : 4. The ratio of the area of Field A to that of Field C is 9 : 7. Find the ratio of the area of Field A to that of Field B to that of Field C.

11 Raju and Kenny shared a total of 600 stickers in the ratio 2 : 3. After Kenny gave Raju some stickers, the ratio of the number of Raju's stickers to the number of Kenny's stickers was 2 : 1. How many stickers did Kenny give to Raju?

12 The ratio of the number of apples to the number of oranges is  $5 : 2$ . There are 18 more apples than oranges. If 24 oranges are added, what will be the new ratio of the number of apples to the number of oranges?

13 A total of 500 ml of liquid was poured into Jar P and Jar Q in the ratio  $4 : 1$ . When more liquid was added to Jar Q, the ratio of the volume of liquid in Jar P to that in Jar Q became  $8 : 3$ . What was the volume of liquid that was added to Jar Q?



## 2

# Percentage

### Worksheet 1

## One quantity as a percentage of another

1 What percentage of 500 ml is 75 ml?

2 Express 27 g as a percentage of 180 g.

3 What percentage of 200 l is 248 l?

4 Express 2475 cm as a percentage of 990 cm.



5 There are 50 girls and 40 boys in a tuition centre.

- (a) Express the number of girls as a percentage of the number of boys.
- (b) Express the number of boys as a percentage of the number of girls.

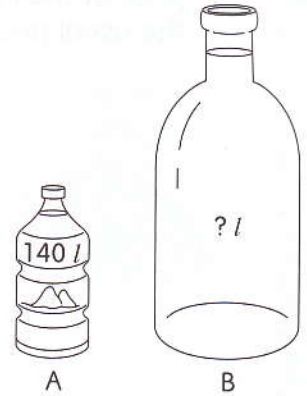


6 Rod X is 28 cm long. Rod Y is 70 cm long.

- (a) Express the length of Rod X as a percentage of the length of Rod Y.
- (b) Express the length of Rod Y as a percentage of the length of Rod X.

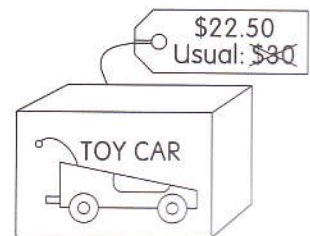
7 The mass of a packet of sugar is 250 g. The mass of a packet of rice is 5 kg. Express the mass of the packet of sugar as a percentage of the mass of the packet of rice.

- 8 Container A has 140 l of water. Container B has 560 l more water than Container A. Express the volume of water in Container A as a percentage of the volume of water in Container B.



- 9 At a funfair, Stall A collected \$860 while Stall B collected \$1247. Express the difference between the amounts collected by the 2 stalls as a percentage of the amount collected by Stall A.

- 10 The usual price of a toy car is \$30. At a sale, the toy car is sold for \$22.50. Express the discount as a percentage of the usual price.

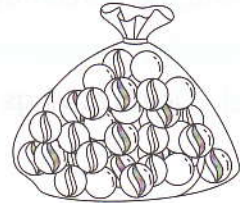


- 11 During a computer exhibition, an inkjet printer was sold at \$280. The usual price of the inkjet printer was \$400. Express the discount as a percentage of the usual price.

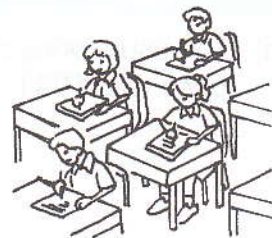
- 12 Mr Lai booked a hotel room at a promotional rate of \$200 per night. The usual rate of the room was \$320 per night. Express the discount as a percentage of the usual rate.

Room  
Promotion  
\$200  
per night  
Usual:  
\$320

- 13 Vani has 40 marbles. Suri has 5% more marbles than Vani. How many marbles does Suri have?



- 14 During an examination, Devi spent 10% more time on her first question than her second question. If she spent 20 minutes on her second question, how much time did she spend on her first question?



1 Find the percentage increase for each of the following.

(a) Devi's savings was increased from \$460 to \$529.

(b) Mr Tan's monthly salary was increased from \$1800 to \$2088.

2 Find the percentage decrease for each price below.

(a) The usual price of a set of reference books was \$980. During a book fair, the price was \$931.

(b) The usual price of a plasma TV was \$7600. During a sale, the price was \$6688.

- 3 The price of eggs was increased from 12 cents to 54 cents per egg.
- (a) Find the increase in the price of eggs.
  - (b) By what percentage did the price of eggs increase?



4

**Round trip fare to Bangkok**

This year's price: \$300

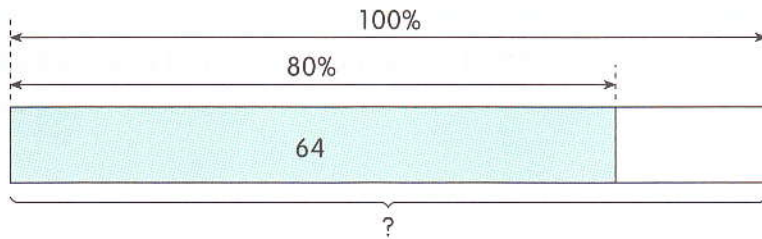
Last year's price: \$480

Great savings! Book now before it's too late.

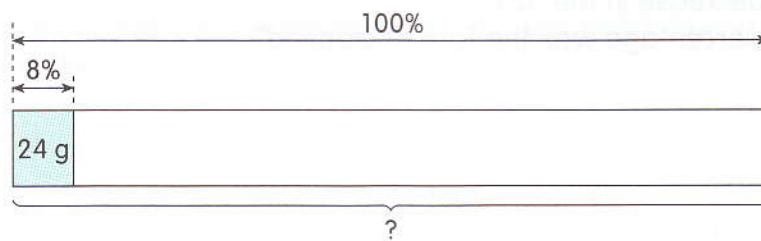
- (a) Find the decrease in the fare.
- (b) By what percentage was the fare decreased?

## Worksheet 3 Finding the whole

- 1 In a singing competition, Mei scored 64 points which was 80% of the total score. Find the total score.



- 2 8% of a solution has a mass of 24 g. Find the mass of the solution.



3 A tyre shop is selling a particular brand of tyres at \$68 this month. The selling price is 15% lower than the usual price. What is the usual price?

4 A job was completed in 44 hours. It was completed ahead of the scheduled time. If the saving in time was 12%, find the duration of the scheduled time.

5 Mary spent 25% of her money on grocery and had \$135 left. How much money did she have at first?

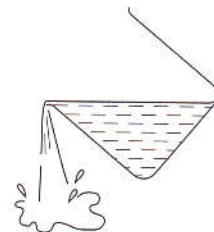


- 6 After Mrs Ho had given 20% of her money to her son and 15% of the remaining amount to her daughter, she had a balance of \$1360.
- (a) How much did Mrs Ho's daughter receive?
- (b) How much did Mrs Ho have at the beginning?



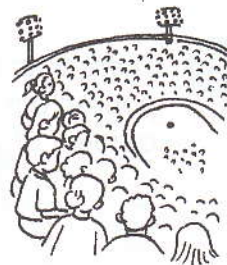
## Worksheet 4 More word problems

- 1 There was some water in a container. After 20% of the water was poured out, there was 1500 ml of water left. What was the original amount of water in the container?



- 2 Bakri has some marbles. 25% of his marbles are blue.  $\frac{1}{5}$  of the remaining marbles are red and the rest are green. If he has 240 green marbles, how many marbles does he have altogether?

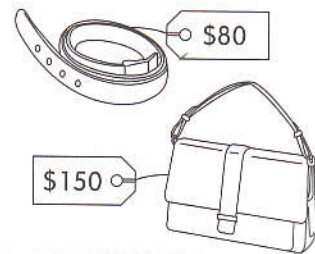
- 3 70% of the spectators in a stadium are male. There are 2400 more males than females in the stadium. How many spectators are there altogether?



- 4 During a promotion, Jane bought a notebook computer at a 23% discount. If she paid \$2618, what was the original price of the notebook computer?

- 5 Ken and Bob had the same amount of savings at first. Then Ken put in another 10% into his savings while Bob spent 15% of his savings. Ken's new savings was \$2200. Express Bob's new savings as a percentage of Ken's new savings. (Give your answer correct to 1 decimal place.)

- 6 The price of a handbag was \$150 while the price of a belt was \$80. Mrs Chong bought the handbag at a 20% discount and the belt at a 10% discount. How much did she pay altogether?



## Skill Practice 2

1 Express 95.2 cm as a percentage of 680 cm.

2 Express 990 l as a percentage of 360 l.

3 What percentage of \$5000 is \$1230?

4 What percentage of 50 kg is 2.5 kg?

5 Find the percentage increase or decrease for each of the following.

(a) The usual price of a laptop was \$4000. During a sale, the price was \$2400.

(b) Last month, Jane's salary was \$1500. This month, her salary is \$1830.

(c) Calvin's mass was 78 kg last year. His mass is 91.26 kg now.

6

Find the quantity of the whole.

(a) 4% of the marbles in a box are yellow. If there are 6 yellow marbles, how many marbles are there altogether?

(b) A baker used 20% of the flour in his bakery to bake cakes. If he used 42.5 kg of flour to bake cakes, what was the mass of flour in his bakery at first?

(c) Mrs Jones had some money in her purse. She spent 65% of the money on a watch. The cost of the watch was \$260. How much money did she have at first?

- 7 Jamie has \$1400. Tina has 35% less than Jamie. How much money does Tina have?

- 8 The usual price of a computer was \$2000. During a promotion, the price of the computer was \$1800. Ali bought a computer during the promotion and got a further 5% discount off the promotional price. How much did he save in all?



- 9 Mr Tan jogs 6 km every morning. He then walks a distance that is 25% less than the distance he jogs. What is the total distance he jogs and walks altogether every morning? Give your answer in kilometres and metres.



- 10 Mary made some cookies at home. She gave 20% of the cookies to her neighbour and sold 70% of the remaining cookies. If she made 1800 cookies, how many cookies had she left?

- 11 Last year, a school had 450 new pupils, making a total of 1600 pupils. This year, there are 504 new pupils but 8% of the number of last year's pupils left the school.
- (a) Find the percentage increase in the number of new pupils in the 2 years.
  - (b) How many pupils left the school?
  - (c) What is the total number of pupils in the school this year?



# Revision 1

1 Express the following ratios as fractions.

(a)  $A : B = 5 : 8$

For example:

A is  $\frac{5}{8}$  of B.

(b)  $P : Q = 12 : 20$

P is \_\_\_\_\_ of Q.

(c)  $X : Y = \frac{2}{5} : 4$

X is \_\_\_\_\_ of Y.

(d)  $C : D = 21 : 7$

C is \_\_\_\_\_ of D.

2 Complete the following proportion tables.

(a)

<b>Singapore Dollar</b>	1	5	9.5		
<b>Thai Baht</b>	24			264	360

(b)

<b>Number of health drink powder packets</b>	2	4	12		
<b>Mass of health drink powder (g)</b>	540			1620	4320



- (c) A laundry worker uses 55 ml of fabric softener for 3 kg of clothes. Complete the table below.

<b>Amount of fabric softener (ml)</b>	55			495	5555
<b>Mass of clothes (kg)</b>	3	9	13.5		

- (d) Christina earns an interest of \$2 for every \$1000 deposited into her savings account in a bank. Complete the table below.

<b>Interest (\$)</b>	2		7		15
<b>Deposit (\$)</b>	1000	2000		5500	

- 3 Express each given number in different forms.

 <b>Number in decimal</b>	<b>Number in fraction or mixed number</b>	 <b>Number in percentage</b>
(a) 0.78		
(b)	$1\frac{2}{5}$	
(c)		240%

- 4 Find the corresponding expressions for each pair of the following quantities.

Pairs of quantities	B as a percentage of A	B as a fraction of A	Ratio A : B
(a) A = 450 cm B = 180 cm			
(b) A = 8 kg B = 1.36 kg			
(c) A = 3200 ml B = 2.4 l			
(d) A = 2 h B = 1 h 15 min			

- 5 Fill in the missing information in the following table.

Part	Whole	Part as a percentage of the whole
(a) 27 m	45 m	
(b) 6.8 g		8 %
(c)	9660 ml	30%
(d) \$63	\$200	

6 In a farm, the ratio of the number of ducks to the number of chickens is  $7 : 4$  and the ratio of the number of chickens to the number of geese is  $2 : 1$ . What is the ratio of the number of ducks to the number of geese?

7 A fruitseller has some apples, pears and oranges. The ratio of the number of apples to the number of pears is  $2 : 5$ . The ratio of the number of pears to the number of oranges is  $4 : 3$ . Find the ratio of the number of apples to the number of pears to the number of oranges.

- 8 3 cups of cappuccino cost \$15. How much will it cost to buy 12 such cups of cappuccino?

- 9 Kenny can make 3 tables in 2 days.
- (a) How many such tables can he make in 18 days?
  - (b) How long will he take to make 54 such tables?

10 In a day, Peter can make 7 boxes while John can make 3 boxes. There are 190 boxes to be made. How many days will the two boys take to make these boxes if they start at the same time?

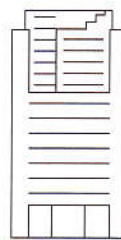
11 Rick spent 55% of his pocket money on food and 20% of the remainder on a movie. What percentage of his pocket money did he spend altogether?



- 12 The ratio of the number of comic books to the number of storybooks in a shop is 1 : 4. If 25% of the storybooks are sold, what is the new ratio of the number of comic books to the number of storybooks?

- 13 Mr Khoo made 100 pieces of doughnut. He sold 35 pieces at \$0.40 each and 40% of the remainder at \$0.50 each. How much money did he collect altogether?

- 14 The room rates for a standard room in Hotel A was \$140 per night. During the holiday season, the room rates went up by 25%. Faridah wanted to book a room and found that Hotel B offered her a rate that was 20% lower than the increased rate of Hotel A. How much did Faridah save by booking a room for a night in Hotel B instead of Hotel A?



Hotel A



Hotel B

## Revision 2

1

$A : B = 5 : 8$  and  $B : C = 4 : 7$ .

- (a) Find  $A : C$ .
- (b) Find  $A : B : C$ .

2

Answer the following questions.

- (a) The ratio of the number of children to the number of adults at a party is  $51 : 136$ . Express the number of children as a fraction of the number of adults.
- (b) Express 100 g as a percentage of 250 g.
- (c) Ben has 150 stamps. 6% of the stamps are Malaysian stamps. How many Malaysian stamps does Ben have?
- (d) Janet had some money in her purse. She used 40% of the money to pay for a blouse. The blouse cost \$28. How much money did Janet have in her purse at first?

3

There are 24 green apples and 56 red apples in a basket.

(a) Express the number of green apples as a fraction of the number of red apples.

\_\_\_\_\_

(b) Express the number of red apples as a fraction of the total number of apples.

\_\_\_\_\_

4 Find the percentage for each pair of quantities.

Pairs of quantities	B as a percentage of A
(a) $A = 680 \text{ cm}$ $B = 95.2 \text{ cm}$	
(b) $A = 200 \text{ g}$ $B = 62 \text{ g}$	

5 Fill in the blanks.

(a)  $34\% \times 150 =$  \_\_\_\_\_

(b)  $2.4\% \times 600 =$  \_\_\_\_\_

6

Answer the following questions.

(a) 8% of the cost of a dress is \$6.40.  
Find the cost of the dress.

(b) The volume of 5 g of oxygen gas is 750 ml.  
What is the volume of 27 g of oxygen gas?

(c) A snail can travel 34 mm in 10 seconds.  
How far can it travel in 50 seconds?

(d) The mass of  $10 \text{ cm}^3$  of an organic liquid is 26 g.  
Find the mass of  $33 \text{ cm}^3$  of organic liquid.

7

Nancy, Wenbin and Lifen shared a sum of money in the ratio 2 : 3 : 5. If Nancy's share was \$160,

- (a) how much was Lifen's share?
- (b) how much was the sum of money?

8

A  $12\text{ cm} \times 8\text{ cm}$  picture is enlarged by the same proportion such that the length of the enlarged picture is 15 cm.

- (a) Find the breadth of the enlarged picture.
- (b) What is the ratio of the area of the original picture to the area of the enlarged picture?

9

Ron's, Ken's and Paul's pocket money are in the ratio  $1 : 3 : 4$ . If Paul gives Ron \$3, the ratio of Ken's money to Paul's money will become  $6 : 7$ . What is the amount of Ron's pocket money at first?

10

The length and breadth of a rectangle are in the ratio  $5 : 4$ . If the perimeter of the rectangle is 720 m, find its breadth.

11

Muthu has \$25. Raju has 15% more than Muthu.

- (a) How much does Raju have?
- (b) How much do both of them have altogether?



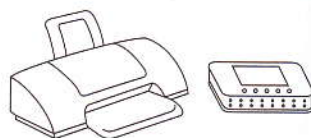
12

Betty baked 20% more coconut cookies than sugar cookies. After selling some coconut cookies, the percentage of the total number of coconut cookies baked was reduced by 40%. If she baked 200 sugar cookies,

- (a) how many coconut cookies did she bake?
- (b) what was the total number of cookies left?

13

The cost of a printer was \$320. The cost of a modem was \$150. Ben had 15% discount on the printer and he paid a total of \$410 for these 2 items. Find the percentage discount of the modem.



14

In March, 4200 pairs of shoes were sold. This was an increase of 20% compared to the number sold in February. In the month of April, the total number sold was 25% less than March's quantity. How many fewer pairs of shoes were sold in April compared to that in February?

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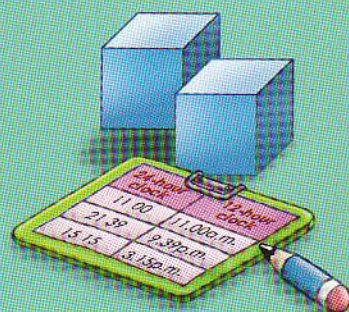
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