# Contents

Exercise	Торіс	Strand	Learning Objectives	Page
1	Applications of percentages (1)	Numero	<ul> <li>Solve problems involving finding percentages</li> </ul>	4
2	Applications of percentages (2)	Number	<ul> <li>Solve problems involving finding values from the given percentages</li> </ul>	6
3	Angles	Measures	<ul> <li>Recognise degree (°)</li> <li>Measure and compare the sizes of angles in degree</li> </ul>	
4	Drawing angles		<ul> <li>Draw angles of given sizes</li> </ul>	10
5	Circumferences (1)		<ul> <li>Recognise π</li> <li>Recognise and use the formula for circumference</li> <li>Solve problems involving circumference</li> </ul>	12
6	Circumferences (2)	Measures	<ul> <li>By the advanced use of the formula for circumference, find the perimeters of 2-D shapes formed by circles and semicircles</li> <li>Solve harder problems involving circumference</li> </ul>	14
7	Time	Measures	<ul> <li>Perform the interconversion between units of time</li> <li>Solve problems involving time intervals</li> </ul>	16
8	Speed (1)		Measures	<ul> <li>Recognise the concept of speed</li> <li>Compare the speed of objects intuitively and directly</li> <li>Compare the speed of objects in improvised units</li> <li>Recognise metres per second (m/s) and kilometres per hour (km/h)</li> </ul>
9	Speed (2)		<ul> <li>Solve problems involving finding distance from the given speed and time</li> <li>Solve problems involving finding time from the given speed and distance</li> </ul>	20
10	Travel graphs		Read travel graphs	22
	Assessment 1		Cover the content of exercises 1 - 10	24
11	Simple equations (1)		<ul> <li>Solve simple equations involving whole numbers, fractions, decimals or percentages</li> </ul>	28
12	Simple equations (2)		<ul> <li>Write the expressions and equations involving like terms</li> <li>Solve simple equations involving like terms</li> </ul>	30
13	Problems involving simple equations	Algebra	<ul> <li>Solve problems by using simple equations</li> <li>Solve problems on finding the lengths of sides or diameter of a 2-D shape from its perimeter or area by using simple equations</li> <li>Solve problems on finding the original values from the given percentages or fractions by using simple equations</li> </ul>	32

© United Prime Educational Publishing (HK) Limited 2023 All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.

Exercise	Торіс	Strand	Learning Objectives	Page
14	Areas of circles (1)	Measures	<ul> <li>Recognise the formula for areas of circles</li> <li>By using the formula for areas of circles, find the areas of circles</li> <li>Solve problems involving finding the areas of circles</li> </ul>	34
15	Areas of circles (2)	Measures	<ul> <li>By the advanced use of the formula for areas of circles, find the areas of 2-D shapes formed by circles and semicircles</li> <li>Solve harder problems involving finding the areas of circles</li> </ul>	36
16	Pie charts (1)		<ul> <li>Recognise pie charts</li> <li>Read pie charts (involving the angle at the centre of each sector)</li> </ul>	38
17	Pie charts (2)	Data Handling	<ul> <li>Read pie charts (involving the percentage of each sector)</li> </ul>	40
18	Uses and abuses of statistics	Tianuing	<ul> <li>Present the data with appropriate statistical charts</li> <li>Discuss and recognise the uses and abuses of statistical charts in daily life</li> </ul>	42
19	Non-metric units (Enrichment)		<ul> <li>Recognise the non-metric units in daily iffe</li> <li>Perform the interconversion between non- metric units and metric units</li> </ul>	44
	Assessment 2	an	<ul> <li>Cover the content of exercises 11 - 18</li> </ul>	46
	Final Assessment	S	Cover the content of exercises 1 - 18	50

## **Additional Resources:**

Cross-topic Exercise	58
<ul> <li>Challenging Problems ('Inquiry and Investigation' in the latest curriculum)</li> </ul>	60
<ul> <li>Revision Notes</li> </ul>	62

Answer Booklet (Including Solution Guide, Common Mistakes Explanation, MCQ Explanation)

© United Prime Educational Publishing (HK) Limited 2023 All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.

<b>Speed</b>	(2)	
1 - minute Re	vision _	
	Concept Review	
Formulae of speed		<u>}</u>
Formulae of speed <ul> <li>(Find speed)</li> </ul>	Speed = Distance ÷ Time	)
-	Speed = Distance ÷ Time Distance = Speed × Time	

# **2** Basic Practice

### According to the data given in the table, complete the table below.

	Distance	Time	Speed
1.	360 m	second(s)	8 m/s
2.	9 km	hour(s)	1.5 km/h
3.	m	240 seconds	$3\frac{3}{4}$ m/s
4.	km	40 minutes	0.6 km/h
5.	15 km	minutes	75 km/h
			·

### Complete the following.

- 6. A tram takes \_\_\_\_\_\_ hour(s) to travel 20 km at an average speed of 15 km/h.
- 7. Uncle Joe runs at an average speed of 3 m/s. After 30 minutes, he runs \_\_\_\_\_ m.
- A lorry departs from a warehouse at an average speed of 72 km/h. After travelling 1 hour and 10 minutes, it reaches an exhibition hall. The warehouse and the exhibition hall are \_\_\_\_\_ km apart.
- 9. Iris cycles at an average speed of 9 m/s. She takes \_\_\_\_\_ minute(s) to cycle 5.4 km.
- **10.** Candy leaves home at 07:30. She walks to school at an average speed of 0.8 m/s. She reaches the school at 07:45. The school and Candy's home are \_\_\_\_\_ m apart.
- **11.** Rocky goes hiking at an average speed of 3.6 km/h. The whole journey is 8.1 km. He starts hiking at 9:15 a.m. He finishes hiking at \_\_\_\_\_\_ ( a.m. / p.m. )
- 12. Jack takes 16 minutes to walk quickly from his home to a library at an average speed of 1.5 m/s. After returning books, he takes 30 minutes to return home. The average speed that Jack walks back home is m/s.



13. Dad takes 45 minutes to drive from home to the airport at an average speed of 60 km/h. He drives at an average speed of 75 km/h when returning home. He takes \_\_\_\_\_ hour(s) to return home.

	Date	Time us	ed minutes	Marks
.3	Advanced	Practice		
	•	(Show your workin	•	rage speed of 60 km/h
			is the lorry away from	
Ŭ				
(				
<b>5</b> . T	he distance from	n the foot to the peak	of a hill is 11 km. Lily	walks 5 km to the hillsi
			-	peed of 2.4 km/h to the
th	ne hill. How many	y hours does Lily tak	e to walk from the foot	to the peak of the hill?
(	,		-01	
			np	
		600	npl	
		S	nple	
		S	nple	
		S	nple	
Black	ren the O next	So	MOR	
	<u> </u>	t to the correct answ are 50 m apart. The		eful Tips
6. N	lum and Ronald		y walk towards	v many seconds does Ronald wa
6. N e w	lum and Ronald ach other and n valking speed of l	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha	y walk towards	· _
6. M e w	lum and Ronald ach other and n	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha	y walk towards	many seconds does Ronald wa
6. N e w	lum and Ronald ach other and n valking speed of l	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha	y walk towards	r many seconds does Ronald wa
6. N e w s	Ium and Ronald ach other and n valking speed of I peed of Ronald? A. 2.5 m/s	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha B. 1.5 m/s	y walk towards If the average t is the average C. 1.25 m/s	y many seconds does Ronald wa y many metres does he walk?
6. N e w s  7. J	Ium and Ronald ach other and n valking speed of I peed of Ronald? A. 2.5 m/s enny runs 800 m	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha B. 1.5 m/s n in a stadium. Then,	y walk towards If the average t is the average C. 1.25 m/s she runs 400 m from	many seconds does Ronald way many metres does he walk? D. 1 m/s the stadium to a park.
6. № e w s  7. Je re	fum and Ronald ach other and n valking speed of I peed of Ronald? A. 2.5 m/s enny runs 800 m eaches the park a	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha B. 1.5 m/s n in a stadium. Then,	y walk towards If the average t is the average C. 1.25 m/s she runs 400 m from uns at an average spe	many seconds does Ronald way many metres does he walk? D. 1 m/s the stadium to a park. S
6. N e. w s  7. Je re	fum and Ronald ach other and n valking speed of I peed of Ronald? A. 2.5 m/s enny runs 800 m eaches the park a	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha B. 1.5 m/s n in a stadium. Then, at 10:00 a.m. If she r	y walk towards If the average t is the average C. 1.25 m/s she runs 400 m from uns at an average spe	many seconds does Ronald wa many metres does he walk?
6. N e s 7. J re jc	Aum and Ronald ach other and n valking speed of I peed of Ronald? A. 2.5 m/s enny runs 800 m eaches the park a ourney, when doe A. 9:52 a.m.	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha B. 1.5 m/s in a stadium. Then, at 10:00 a.m. If she r es she start running? B. 9:50 a.m.	y walk towards If the average t is the average C. 1.25 m/s she runs 400 m from uns at an average spector C. 9:10 a.m.	many seconds does Ronald way many metres does he walk? D. 1 m/s the stadium to a park. S eed of 2.5 m/s for the w D. 9:08 a.m.
6. N e w s 7. Ja re jc 8. Iv	Ium and Ronald ach other and n valking speed of I peed of Ronald? A. 2.5 m/s enny runs 800 m eaches the park a purney, when doe A. 9:52 a.m. van and Joyce be	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha B. 1.5 m/s in a stadium. Then, at 10:00 a.m. If she r es she start running? B. 9:50 a.m. egin their journey at t	ey walk towards If the average is the average C. 1.25 m/s she runs 400 m from uns at an average spector C. 9:10 a.m. he same time and the	many seconds does Ronald way many metres does he walk? D. 1 m/s the stadium to a park. Seed of 2.5 m/s for the w D. 9:08 a.m. same place and walk i
<ul> <li>6. N</li> <li>e.</li> <li>w</li> <li>s </li> <li>7. Je</li> <li>7. Je</li> <li>7. Je</li> <li>8. Iv</li> <li>0</li> </ul>	Aum and Ronald ach other and n valking speed of I peed of Ronald? A. 2.5 m/s enny runs 800 m eaches the park a purney, when doe A. 9:52 a.m. van and Joyce be pposite direction	are 50 m apart. The neet in 20 seconds. Mum is 1.5 m/s, wha B. 1.5 m/s in a stadium. Then, at 10:00 a.m. If she r es she start running? B. 9:50 a.m. egin their journey at t	y walk towards If the average is the average C. 1.25 m/s c. 1.25 m/s c. 1.25 m/s c. 9:10 a.m. c. 9:10 a.m. he same time and the ach hour. After 2 hour	many seconds does Ronald way many metres does he walk? D. 1 m/s the stadium to a park. S eed of 2.5 m/s for the w

All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.

Final Assessment

Name:	Class:( )	Date:	

	Assessment Points	Questions	Marks
Applications of percentages	Solve problems involving finding percentages or finding values from the given percentages	1–7	/ 16
Angles	Measure and compare the sizes of angles in degree, draw angles of given sizes	8–13	/ 12
Circumferences	Find circumferences, diameters, radii and perimeters of 2-D shapes	14a, 15a, 16, 17a, 18a, 20b, 21a	/ 14
Speed	Find time intervals, speeds, times and distances	20c, 21b, 22–29	/ 20
Simple equations	Solve equations, solve problems by using equations	30–35	/ 16
Areas of circles	Find areas of circles and areas of 2-D shapes involving circles	14b, 15b, 17b, 18b–20a	/ 11
Pie charts and uses and abuses of statistics	Read pie charts, choose the appropriate statistical charts	36–38	/ 11
		Total marks:	/ 100

- Instructions
- **Multiple choice questions:** Blacken the  $\bigcirc$  next to the correct answer.
  - Questions in which you are asked to 'show your working': Write your mathematical expressions, answers, and statements / conclusions.

Marks

1M

1M

3M

1M

1M

1M

1M

- Other types of questions: Answer as required in the spaces provided.
- There are 80 pork buns and 50 custard buns in a steam oven. 1.
  - a.
  - The number of pork buns is \_\_\_\_\_% that of custard buns. The number of custard buns is \_\_\_\_\_% that of pork buns. b.
- 2. There are 18 male and 22 female customers in a fast food shop. What percentage of the customers are female?

- 3. There are 20 chocolates in a box. Peter eats 4 chocolates, which is 2 fewer than Jack.
  - Jack eats \_\_\_\_\_% of the box of chocolates. a.
  - The number of chocolates that Jack eats is \_\_\_\_\_% that of Peter. b.
- There are 75 cans of coke and 125 cans of juice in a convenience store. 4.
  - 40% of the coke are cola. There are cans of cola. a.
  - Among the juice, 12% are orange juice, 20% are apple juice. There are b. cans of orange juice and apple juice in the convenience

store altogether.

# Cross-topic Exercise

## Complete the following.

- 1. A carton of milk is 1 L. After drinking 250 mL, the remaining milk is \_\_\_\_\_% of the carton of milk.
- Measure the angle on the right.
   Angle a is \_\_\_\_\_% of a straight angle.
- **3.** Tom draws a right-angled triangle in a circle. The radius of the circle is 10 cm.
  - a. The circumference is \_\_\_\_\_ cm. (Take  $\pi$  = 3.14)
  - **b.** The area of the triangle is \_\_\_\_\_ cm<sup>2</sup>.
- 4. Fanny puts a circular ring on a piece of square paper.
  - a. The perimeter of the square paper is \_\_\_\_\_ cm.
  - b. The length of the ring is about \_\_\_\_\_\_ times the side of the square paper. (Give the answer as a whole number.)
- 5. The diameter of a circular lawn is 7.7 m. Mabel walks around the edge of the lawn at an average speed of 1.1 m/s for one lap. She walks for \_\_\_\_\_ second(s). (Take  $\pi = \frac{22}{7}$ )
- 6. In the figure, '•' represents the centre of each circle. The area of the figure on the right is \_\_\_\_\_ m<sup>2</sup>. (Take  $\pi = \frac{22}{7}$ )



## Solve the problems. (Show your working)

7. Location A and location B are 100 km apart. A minibus travels from location A to location B at an average speed of 75 km/h. A bus travels from location B to location A at an average speed of 50 km/h. If two cars depart at the same time, after how many hour(s) will they meet? (Use an equation to solve the problem.)

Prime Weekly Mathematics Exercises (New Curriculum) 6B 58 © United Prime Educational Publishing (HK) Limited 2023 All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.

# **Revision Notes**

## Unit 1: Applications of percentages (Exercises 1-2)

## 1. Finding percentages

There are 20 marbles in a bottle. 12 of them are yellow, 5 of them are blue and the remaining are green.

• $\frac{12}{20} \times 100\%$	• $\frac{20-12-5}{20} \times 100\%$	• $\frac{12}{5} \times 100\%$ The number of blue
= 60%	= 15%	= 240% marbles is the standard of comparison. So, it is the denominator.
60% of the marbles are yellow	15% of the marbles are	The number of yellow marbles
marbles.	green marbles.	is 240% that of blue marbles.
• 60% + 15%	• 60% – 15%	• 100% - 60% - 15%
= 75%	= 45%	= 25%
75% of the marbles are yellow	The percentage of the	25% of the marbles are
marbles and green marbles.	yellow marbles is 45%	blue marbles.
	more than that of green	
	marbles.	

The number of origami star is 5% nore than that of origami crane. The number of origami crane is 3% fewer than that of origami turtle.

• 100% + 5%	• 100% – 3%	• 100% + 10%
= 105%	= 97%	= 110%
The number of origami star is	The number of origami	After folding 10% more
105% that of origami crane.	crane is 97% that of	origami crane, the number
	origami turtle.	of origami crane is 110%
		the original number.

## 2. Finding values from the given percentages

There are 20 cartons of drinks at home. 40% are soya milk, 15% are green tea and the remainder are lemon tea.

• $20 \times (40\% + 15\%)$	• 20×(40%-15%)	• 20×(100%-40%-15%)
= 11	= 5	= 9
There are 11 cartons of	The difference	There are 9 cartons of
soya milk <b>and</b> green	between the numbers	lemon tea.
tea altogether.	of cartons of soya	
	milk and green tea	
	is 5.	
	= 11 There are 11 cartons of soya milk <b>and</b> green	There are 11 cartons of soya milk and greenThe differencetea altogether.between the numbersof cartons of soya milk and green tea

Prime Weekly Mathematics Exercises (New Curriculum) 6B 62 © United Prime Educational Publishing (HK) Limited 2023 All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher. **5.** 12  $[15 \div 75 \times 60 = 12]$ 

### Common mistake: $\frac{1}{5}$ ×

- Neglect that the unit of the answer is minutes. To get the correct answer, we should × 60 to convert hours to minutes.
- **6.**  $1\frac{1}{3}$  [  $20 \div 15 = 1\frac{1}{3}$  ]

**7.** 5400

 $[3 \times 30 \times 60 = 5400]$ 

 $(30 \text{ minutes} = (30 \times 60) \text{ seconds} = 1800 \text{ seconds})$ ]

#### **8.** 84

 $[72 \times (1+10 \div 60) = 84]$ 

(1 hour and 10 minutes =  $(1 + 10 \div 60)$  hours =  $1\frac{1}{6}$  hours)]

#### **9.** 10

 $[5.4 \times 1000 \div 9 \div 60 = 10]$ 

 $(5.4 \text{ km} = (5.4 \times 1000) \text{ m} = 5400 \text{ m})$ ]

#### Common mistake 1: 0.6 ×

 Neglect that the unit of distance is km and neglect that the unit of the answer is minutes. Therefore, wrongly write the expression as 5.4 ÷ 9.

#### Common mistake 2: 600 ×

 Neglect that the unit of the answer is minutes. Therefore, we should ÷ 60 to convert seconds to minutes.

#### **10.** 720

[ The time taken to walk from Candy's home to the school is 15 minutes.  $0.8 \times 15 \times 60 = 720$ (15 minutes = (15 × 60) seconds = 900 seconds) ]

#### **11.** 11:30 a.m.

[ 
$$8.1 \div 3.6 = 2\frac{1}{4}$$
 hours  
 $2\frac{1}{4}$  hours = 2 hours and  $(\frac{1}{4} \times 60)$  minutes  
= 2 hours and 15 minutes  
i.e.: Hour: (9 + 2); Minute: (15 + 15) ]

**12.** 0.8 [ 
$$1.5 \times 16 \times 60 \div (30 \times 60) = 0.8$$
 ]

**13.** 
$$\frac{3}{5}$$
 or 0.6 [  $60 \times (45 \div 60) \div 75 = \frac{3}{5}$  or 0.6 ]

14.  $150 - 60 \times 1\frac{1}{5}$ = 78 The lorry is 78 km away from City B. **15.**  $5 \div 2.5 + (11 - 5) \div 2.4$ = 4.5

Lily takes 4.5 hours to walk from the foot to the peak of the hill.

**16.** D [Ronald walks:  $50 - 1.5 \times 20 = 20$  m

Average speed of Ronald:  $20 \div 20 = 1 \text{ m/s}$ ]

Mum Ronald  

$$1.5 \text{ m/s} \times 20 \text{ s}$$
  $? \text{ m/s} \times 20 \text{ s}$   
 $50 \text{ m}$ 

#### **MCQ Explanation**

Wrong choice	Reason
А	Mistakenly regard 50 m as the distance walked by Ronald. Therefore, wrongly write the expression as $50 \div 20 = 2.5$ .
В	Mistakenly regard the distance find from Mum's speed is the distance walked by Ronald. Therefore, wrongly write the expression as $(1.5 \times 20) \div 20 = 1.5$ .
С	Mistakenly regard 50 m as the distance in the expression and the time for them to walk as $20 \times 2$ . Therefore, wrongly write the expression as $50 \div (20 \times 2) = 1.25$ .

#### **17.** A

[Jenny runs:  $(800 + 400) \div 2.5 = 480$  seconds = 8 minutes

Starting time = Ending time – Time spent ]

#### **MCQ Explanation**

Wrong choice	Reason
В	Mix up the formulae of speed and wrongly write the expression as $(800 + 400) \times 2.5 =$ 3000 seconds = 50 minutes. Then, mistakenly subtract 1 from the hour part of the ending time and regard the minute part as 50.
С	Mix up the formulae of speed and wrongly write the expression as $(800 + 400) \times 2.5 =$ 3000 seconds = 50 minutes.
D	Mistakenly subtract 1 from the hour part of the ending time and add 8 to the minute part.

#### **18.** A

[ Joyce walks:  $14 - 3 \times 2 = 8 \text{ km}$ 

The distance that Joyce walks each hour on average:  $8 \div 2 = 4 \text{ km}$  ]



© United Prime Educational Publishing (HK) Limited 2023

All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.

#### MCQ Explanation

Wrong choice	Reason
В	Mistakenly regard 14 km as the distance walked by Joyce. Therefore, wrongly write the expression as $14 \div 2 = 7$ .
С	Mistakenly find the distance walked by Joyce. Therefore, wrongly write the expression as $14 - (3 \times 2) = 8$ .
D	Mistakenly regard 14 km as the distance walked by Joyce. Also, wrongly regard the distance in the expression as 'distance walked by Joyce' + 'distance walked by Ivan'. Therefore, wrongly write the expression as $(14 + 3 \times 2) \div 2 = 10$ .

## **10** Travel graphs

- 1200, 2400 1.
- 2. 17:45, 1 hour and 45 minutes

#### $\frac{8}{21}$ 3.

[ 1 hour and 45 minutes =  $(1 \times 60 + 45) \times 60$  seconds = 6300 seconds

Average speed of May:  $1200 \times 2 \div 6300 = \frac{8}{21}$  m/s ]

- 4. 16:45.30
- 5. 30, 12

[Each small unit on the vertical axis stands for 1 km.]

6. 8

[ Distance: 12 km, time:  $1\frac{1}{2}$  hours

Average speed:  $12 \div 1\frac{1}{2} = 8 \text{ km/h}$ ]

- 7. 12:30
- 8. 24, earlier

[ Each small unit on the horizontal axis stands for:

 $30 \div 5 = 6$  minutes ]

- 9. departed from, 11:50 a.m., beach, 1:00 p.m.
- **10.** 12:22 p.m., 19

[ Time:

On the horizontal axis, each large unit stands for 10 minutes, each small unit stands for 2 minutes. Distance: On the vertical axis, each large unit stands for 5 km, each small unit stands for 1 km.

Distance away from the estate: 11 km, distance away from the beach: 30 - 11 = 19 km ]

**11.** 36

[ Distance: 30 km, time:  $\frac{50}{60}$  hour Average speed:  $30 \div \frac{50}{60} = 36$  km/h ]

- **12.** 8.5
- **13.** 3
- **14.** higher, 2

[ Distance: 12 km, time: 6 hours

Average speed:  $12 \div 6 = 2 \text{ km/h}$ 

#### **15.** 14:00 to16:00

[ The line during this period is the steepest. ]

#### 16. 12:05 p.m.

[ He took 140 minutes to reach the peak. 140 minutes = 2 hours and 20 minutes

Hour: 9 + 2 + 1 = 12; Minute: 45 + 20 - 60 = 5]

Common mistake: 12:05 a.m. × Neglect that after 12:00 noon, the time change from a.m. to p.m.

7. 
$$34\frac{2}{7}$$
 [ Distance: 80 km, time:  $2\frac{20}{60}$  hours

Average speed: 
$$80 \div 2\frac{20}{60} = 34\frac{2}{7}$$
 km/h ]

- **18.** 50 [ 80 30 = 50 ]
- **19.** 1:41 p.m.

[ Distance: 80 km, average speed: 50 km/h

Time:  $80 \div 50 = 1\frac{3}{5}$  hours

 $1\frac{3}{5}$  hours = 1 hour  $(\frac{3}{5} \times 60)$  minutes = 1 hour 36 minutes After reaching the peak at 12:05 p.m., he reached his home at: Hour: 12 + 1 = 13 (i.e. 1 p.m.);

Minute: 5 + 36 = 41]

## Assessment 1

**1. a.** 125% [ $\frac{20}{16} \times 100\%$ ] **b.** 72% [ $\frac{20+16}{50} \times 100\%$ ]

$$2. \quad \frac{250 - 135}{250} \times 100\% = 46\%$$

46% of the stamps are unused stamps.

© United Prime Educational Publishing (HK) Limited 2023

Prime Weekly Mathematics Exercises (New Curriculum) 6B 10 © United Prime Educational Publishing (HK) Limited 2023 All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.