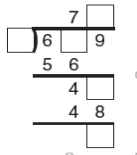
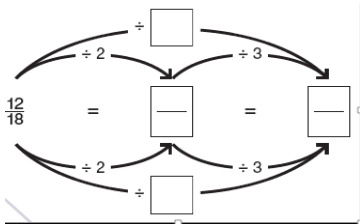



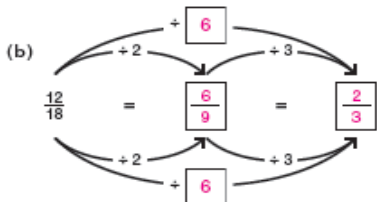
Dimensions Math Textbook 3B			
Page	Question or Section	Error	Date Added
116	1(d)	2,034 m	2/7/2020
126	2(b)	Change the diameter of the bicycle wheel to 26 in.	2/22/2022
152	4(b)	The top angle (peak of the "house") should be a right angle. Until that is fixed, the correct answer is that there are 2 right angles and 3 angles greater than a right angle.	4/7/2023

Dimensions Math Workbook 3B			
Page	Question or Section	Error	Date Added
31	3(c)		5/14/2019
59	2(b)		5/14/2019
158	6	Divide the sum of 40 tens and 2 hundreds by 3.	12/7/2022

Dimensions Math Tests 3B			
Page	Question or Section	Error	Date Added
40	11	8, 112 g	4/19/2021
165	26	The third statement should not have a check mark.	8/5/2020
155	13	The solution at this point in time includes multiplying a 2-digit number by a 2-digit number, which students have not learned. Students can still solve the problem by cutting up the figures further and use computation skills they already know. One possibility is to cut off a 15 by 20 rectangle from both, and find the remaining area, splitting the 14 m side into 10 m and 4 m. So remaining area for the vegetable plot is $13 \times 10 = 130$; $13 \times 4 = 52$; $130 + 52 = 182$ and remaining area for the flower garden is $20 \times 7 = 140$; $8 \times 5 = 40$; $140 + 40 = 180$. The difference is 2 m^2 .	6/7/2022

Dimensions Math Home Instructor's Guide 3B			
Page	Question or Section	Error	Date Added
68	Ex 4 Q6(b)	$1/3 < 7/12 < 3/4$	2/28/2023
193	Ex 8 Q3	Order of fractions in second line should be: $3/7, 1/2, 3/4, 4/5$	2/22/2022

Dimensions Math Teacher's Guide 3B			
Page	Question or Section	Error	Date Added
2	Multiplication chart	3×3 should be 9, not 8	12/7/2020
3	Example problems	$246 \div 2 = \mathbf{123}$ jelly beans $246 \div 2 = \mathbf{123}$ friends	1/29/2021

40	3(c)		5/14/2019
82	Notes for 7 (d) Because $1/12 < 1/9$.	4/3/2023
94	2(b)		5/14/2019
111	Last sentence of second paragraph under Learn	A kilometer is just over half of a mile.	2/28/2022
147	TB p. 126	The diameter of the wheel should be changed to 26 in, so the answer should be 13 in for the radius. Until the textbook is changed, the answer should be 6 in.	2/22/2022
181	TB p. 181, 3(c)	P: $9 + 9 + 5 + 5 + 5 + 5 + 3 + 3 + 3 = 44$ in (error is in printings prior to 2019 reprint)	6/26/2023
222	Learn	The first timeline right under For example: should be 11:20 a.m. (instead of 11:50 a.m.)	11/18/2022
260 - 268	WB Pages	All WB pages in the 2020 printing for Chapter 15 in the Teacher's Guide are incorrect. See next pages for WB answers.	11/4/2020

Workbook 3B Answer Key

Detailed solutions given are suggestions, and do not include all possible methods of arriving at the correct answer. Accept all reasonable solutions by students.

Chapter 15 Money

Exercise 1 • pages 199–201

- 1 (a) Ada: \$2.02, 202¢
Cora: \$6.60, 660¢
Lily: \$3.00, 300¢

(b) \$0.98

(c) \$3.27

(d) Cora

2	\$0.82	82¢
	\$1.23	123¢
	\$6.83	683¢
	\$12.33	1,233¢
	\$46.05	4,605¢

- 3 (a) 65 (b) 0.58
(c) 29 (d) 0.08

- 4 (a) 1,468 (b) 61.25
(c) 1,808 (d) 30.04

- 5 (a) 42
(b) 85

- 6 He has 1 ten-dollar bill.

- 7 4 quarters = \$1.00
4 nickels = \$0.20
He has 4 quarters.

- 8 1 dollar is 20 nickels, and 2 dimes is 4 nickels.
5 quarters is 1 dollar and 1 quarter, which is 25 nickels.
 $24 + 25 = 49$
Ana has 49 nickels.

- 9 1 quarter is 25¢.
For every quarter, he has $2 \times 25¢ = 50¢$ in dimes, or 5 dimes.
For every 6 coins, there is 1 quarter and 5 dimes.
 $30 \div 6 = 5$.
He has 5 quarters and 25 dimes.
5 quarters is \$1.25 and 25 dimes is \$2.50.
He has \$3.75.

1 (a) \$6.62

(b) \$3

(c) 38¢

(d) \$3.38

2 (a) 65¢

(b) 65¢

(c) 65¢

(d) 65¢

3 (a) \$6

(b) \$0.55

(c) \$6.55

4 (a) \$1

(b) \$0.48

(c) \$1.48

5 One Hundred Pennies

6 (a) $\$10.00 - \$4.46 = \$5.54$

(b) Answers may vary.

To make \$5.54 using the
fewest bills and coins,
change would be

1 five-dollar bill, 2 quarters,
and 4 pennies.

1 (a) $65¢ + 60¢ = \$$ 1.25

$\swarrow \quad \searrow$
 $35¢ \quad 25¢$

(b) $85¢ + 50¢ = \$$ 1.35

$\swarrow \quad \searrow$
 $35¢ \quad 50¢$

(c) $\$3.75 + 40¢ = \$$ 4.15

$\swarrow \quad \searrow$
 $25¢ \quad 15¢$

(d) $\$5.85 + 95¢ = \$$ 6.80

$\swarrow \quad \searrow$
 $\$5.80 \quad 5¢$

2 (a) $\$29.35 \xrightarrow{+\$12} \$$ 41.35 $\xrightarrow{+65¢} \$$ 42.00

$\$29.35 + \$12.65 = \$$ 42.00

(b) $\$17.40 \xrightarrow{+60¢} \$$ 18.00 $\xrightarrow{+\$11.25} \$$ 29.25

$\$17.40 + \$11.85 = \$$ 29.25

(c) $\$36.45 \xrightarrow{+\$15} \$$ 51.45 $\xrightarrow{-5¢} \$$ 51.40

$\$36.45 + \$14.95 = \$$ 51.40

3 $\$47.48 \longrightarrow$

$\$15.74 \longrightarrow$

	4	7	4	8	¢
	1	5	7	4	¢
	6	3	2	2	¢

$\$47.48 + \$15.74 = \$$ 63.22

- 4** A: \$74.10
B: \$42.45
G: \$69.35
N: \$40.75
R: \$75.55
E: \$75.20
S: \$63.30
C: 41.28
K: \$24.77

Greenbacks

- 5** $\$21.60 + \$31.85 = \$53.45$
She earned \$53.45.
-

- 6** $\$37.99 + \$14.20 = \$52.19$
The rake costs \$52.19.
-

- 7** $\$39.98 + \$21.56 + \$16.49$
 $= \$78.03$
He spent \$78.03 in all.

1 (a) $\$1 - 80\text{¢} = \$$ 0.20

$\swarrow \quad \searrow$
20¢ 80¢

(b) $\$1.55 - 80\text{¢} = \$$ 0.75

$\swarrow \quad \searrow$
 55¢ \\$1.00

(c) $\$1 - 55\text{¢} = \$$ 0.45

$\swarrow \quad \searrow$
45¢ 55¢

(d) $\$5.15 - 55\text{¢} = \$$ 4.60

$\swarrow \quad \searrow$
 \\$4.15 \\$1.00

2 (a) $\$20.35 \xrightarrow{- \$12} \$$ 8.35 $\xrightarrow{- 65\text{¢}} \$$ 7.70

$\$20.35 - \$12.65 = \$$ 7.70

(b) $\$17.40 \xrightarrow{- 40\text{¢}} \$$ 17.00 $\xrightarrow{- \$11.45} \$$ 5.55

$\$17.40 - \$11.85 = \$$ 5.55

(c) $\$36.45 \xrightarrow{- \$15} \$$ 21.45 $\xrightarrow{+ 5\text{¢}} \$$ 21.50

$\$36.45 - \$14.95 = \$$ 21.50

3 $\$42.46 \longrightarrow$ 4, 2 4 6 ¢

$\$15.78 \longrightarrow$ $-$

1	5	7	8
2	6	6	8

 ¢

$\$42.46 - \$15.78 = \$$ 26.68

- 4** A: \$42.80
N: \$40.55
O: \$17.75
I: \$3.85
R: \$17.85
G: \$19.35
I: \$18.95
O: 44.44
L: \$38.39

A roaring lion

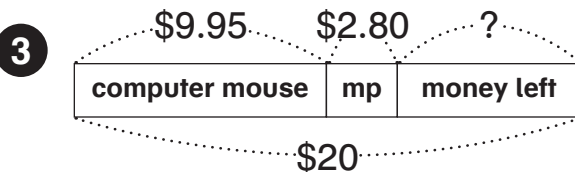
- 5** Liam has \$32.55.
Fernando has more money.
He has 30¢ more.
-

- 6** $\$80.00 - \$68.87 = \$11.13$
Olga received \$11.13 in change.
-

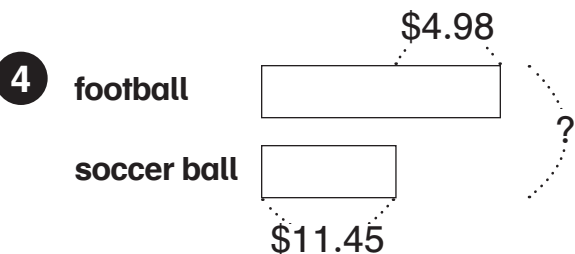
- 7** $\$79.27 - \$17.80 = \$61.47$
The wheelbarrow cost \$61.47.

- 1** Shirt: $\$34.65 - \$12.80 = \$21.85$
 Jacket: $\$21.85 + \$20.60 = \$42.45$
 Pants, shirt, and jacket:
 $\$34.65 + \$21.85 + \$42.45 = \98.95
 The three items cost \$98.95 altogether.

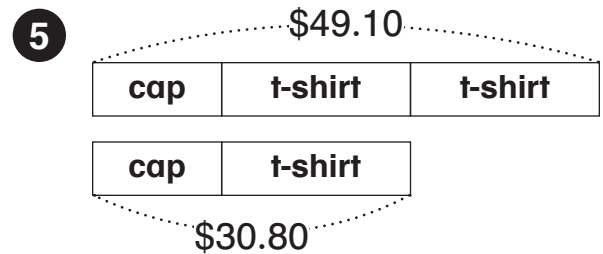
- 2** 1 shirt: $\$45 \div 3 = \15
 $6 \times \$15 = \90
 $\$90 + \$5.20 = \$95.20$
 5 shirts and 1 dress cost \$95.20.
 or
 $2 \times \$45 = \90
 $\$90 + \$5.20 = \$95.20$



Money spent: $\$9.95 + \$2.80 = \$12.75$
 $\$20.00 - \$12.75 = \$7.25$
 He has \$7.25 left.



$\$11.45 + \$4.98 = \$16.43$
 (cost of football)
 $\$11.45 + \$16.43 = \$27.88$
 The two balls cost \$27.88 altogether.



$\$49.10 - \$30.80 = \$18.30$
 1 t-shirt costs \$18.30.
 $\$30.80 - \$18.30 = \$12.50$
 The cap costs \$12.50.

- 6** Speakers: $\$29.50 - \$2 = \$27.50$
 Headphones: $\$19.15 - \$0.50 = \$18.65$
 $\$27.50 + \$18.65 = \$46.15$
 Josef spent \$46.15.

- 7** $\$38 \times 9 = \342
 $\$49.50 + \$15.75 = \$65.25$
 $\$342 - \$65.25 = \$276.75$
 She had \$276.75 left.

- 8** $\$51 + \$33 = \$84$
 7 vases and 7 placemats cost \$84.
 $\$84 \div 7 = \12
 1 place mat and 1 vase cost \$12.

- 1 (a) \$43.05, 4,305¢
(b) \$56.95

- 2 (a) $26 \div 4$ is 6 with a remainder of 2.
He will have 2 quarters left over.
(b) He has \$6.50 in quarters.
He will have 65 dimes.

- 3 (a) \$0.11 (b) \$5.56
(c) \$3.79 (d) \$5.25

- 4 (a) $\$39.50 - \$21.95 = \$17.55$
The helmet costs \$17.55 more than the bat.
(b) $\$62.16 + \$24 = \$86.16$
 $\$90 - \$86.16 = \$3.84$
She received \$3.84 in change.
(c) $\$79.45 + \$23.85 + \$39.50 = \142.80
She spent \$142.80.
(d) He bought the helmet and the skateboard.

- (e) 18 tennis balls is 2 more cans of balls.

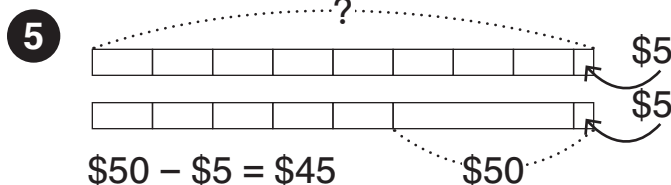
$$\$24 \div 2 = \$12$$

$$\$24 + \$12 = \$36$$

18 balls would cost \$36.

- (f) $\$62.16 + \$10.85 + \$4.10$
 $+ \$4.10 = \81.21

She spent \$81.21 altogether.



$$\$50 - \$5 = \$45$$

$$\$45 \div 3 = \$15 \text{ (cost of 1 placemat)}$$

$$\$15 \times 8 = \$120$$

$$\$120 + \$5 = \$125$$

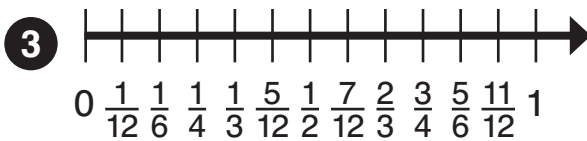
She has \$125.

- 6 There are only 2 possible combinations with 6 bills.
Logan has 1 \$1-bill, 1 \$5-bill, 3 \$10-bills, and 1 \$20-bill.
(John has 1 \$1-bill, 3 \$5-bills, and 2 \$20-bills).

- 7 $\$66 - \$40 = \$26$
2 balls = \$26, so 1 ball = \$13
 $\$49 - \$13 = \$36$
2 tigers = \$36, so 1 tiger = \$18
 $\$40 - \$18 = \$22$
1 car = \$22

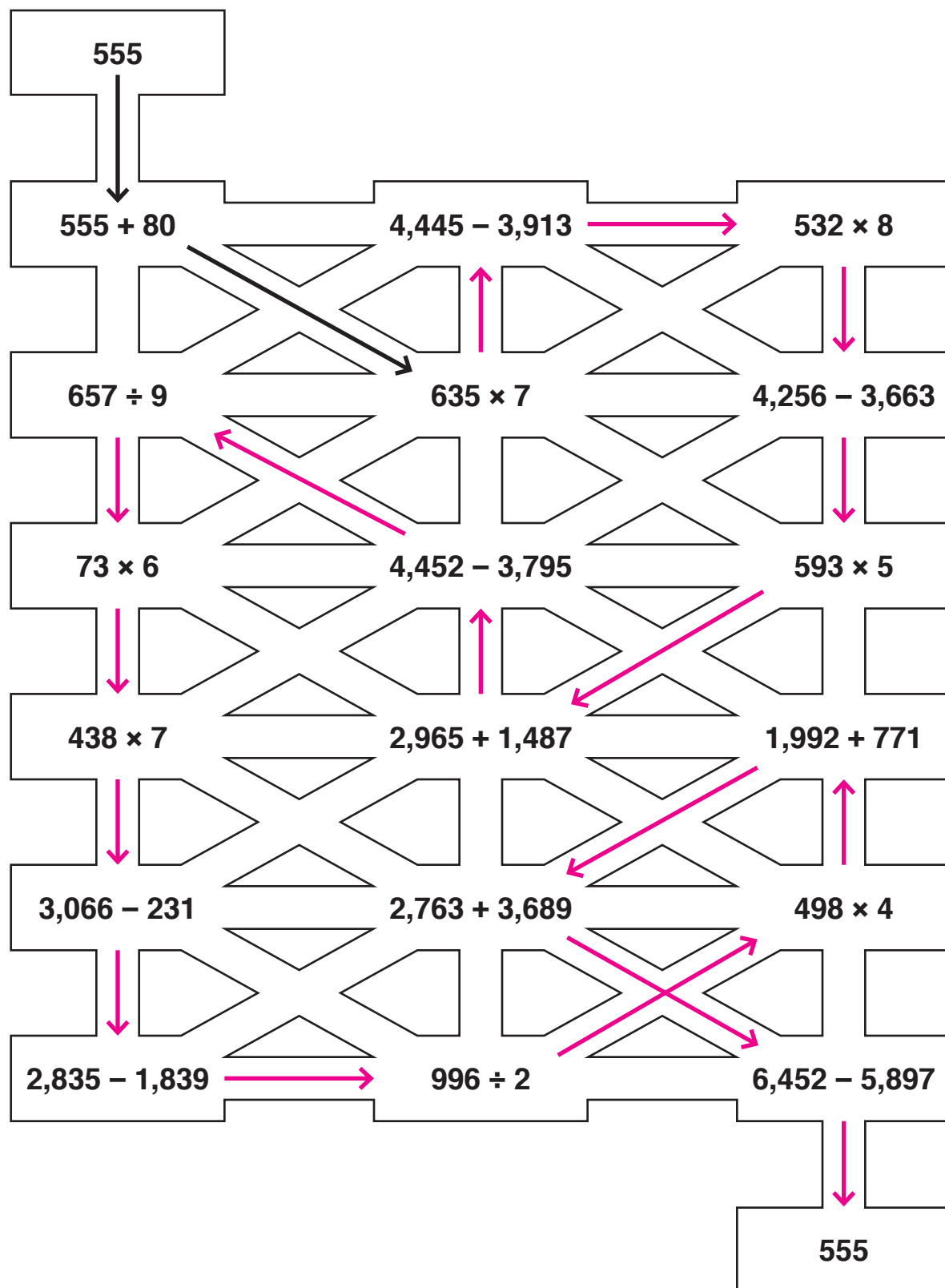
1 4,209

2 The quotient is 85 and the remainder is 7.



4 $2,250 \text{ mL} - 1,340 \text{ mL} = 910 \text{ mL}$
 Bottle: 910 mL
 $910 \text{ mL} + 2,250 \text{ mL} = 3 \text{ L } 160 \text{ mL}$
 The total volume of the jug and the bottle is 3 L 160 mL.

5



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

(b) 32 square units

Students can count units in one section and multiply by 4, or divide the product of 8 and 8 by 2.

7 16

8 (a) $66 \div 5$ is 13 with a remainder of 1.
About 13 miles away.

(b) $340 \text{ m} \times 9 = 3,060 \text{ m}$
 $= 3 \text{ km } 60 \text{ m}$
About 3 km 60 m

9 (a) $7 \text{ cm} + 7 \text{ cm} + 12 \text{ cm} = 26 \text{ cm}$

(b) 2

(c) 2

(d) $7 \text{ cm} \times 4 = 28 \text{ cm}$
A rhombus with a perimeter of 28 cm

10 (a) $10 \text{ min } 11 \text{ s} - 8 \text{ min } 3 \text{ s} = 2 \text{ min } 8 \text{ s}$
2 min 8 s longer

(b) April 8 is 6 days after April 2.
There will be a gain of 6 times as many minutes and 6 times as many seconds, or 12 min and 48 s, which is 12 min 48 s.

$12 \text{ h } 10 \text{ min } 11 \text{ s} + 12 \text{ min } 48 \text{ s} = 12 \text{ h } 22 \text{ min } 59 \text{ s}$

There will be 12 h 22 min 59 s of daylight.

11 $120 \text{ m} + 60 \text{ m} = 180 \text{ m}$
 $180 \text{ m} \times 2 = 360 \text{ m}$
 $360 \text{ m} \times 3 = 1,080 \text{ m}$, which is more than 1 km.
Lincoln would have to run around it at least 3 times.

12 Every 6 sides has a length of 37 cm.
The whole figure has 24 sides.
 $24 \div 6 = 4$
 $37 \text{ cm} \times 4 = 148 \text{ cm}$
The perimeter is 148 cm.

13 Kaiden

--	--	--	--	--

Paula

--

\$183

3 units $\rightarrow 183$

1 unit $\rightarrow 183 \div 3 = 61$

5 units $\rightarrow 5 \times 61 = 305$

Kaiden had \$305 at first.

Exercise 8 • pages 222–226

- 1 (a) 280 (b) 36
(c) 5 (d) 9

- 2 \$4.80 can be made with 19 quarters and 1 nickel.
She can buy 19 lollipops.

- 3 $\frac{3}{7}$ $\frac{1}{2}$ $\frac{3}{4}$ $\frac{4}{5}$

- 4 (a) A: 152 cm
B: 3 m 48 cm
C: 370 cm
D: 1 m 58 cm

(b) C

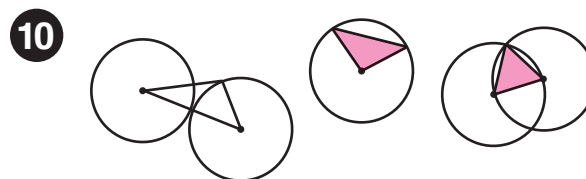
- 5 $\frac{5}{9}$ m of Pole A and $\frac{2}{9}$ m of Pole B is painted yellow.
 $\frac{5}{9}$ m $-\frac{2}{9}$ m $=\frac{3}{9}$ m $=\frac{1}{3}$ m
Pole A has a longer length painted yellow, by $\frac{1}{3}$ m.

- 6 3:10 p.m.

- 7 13 h 15 min

- 8 (a) 2 min 55 s
(b) See last page.
(c) 105 s, 2 min 45 s, 2 min 55 s, 3 min 10 s, 195 s
(d) 90 s, or 1 min 30 s

- 9 Perimeter: 38 cm
Area: 44 cm²



- 11 Bar model on last page.

Note: 145 cartons of 6 eggs is the same quantity as 6 groups of 145.

$$1,098 - 874 = 224$$

He has sold 224 eggs so far.

- 12 100 pennies weigh 250 g
700 pennies weigh $250 \text{ g} \times 7$
 $= 1,750 \text{ g}$
His collection of pennies weighs 1 kg 750 g.

- 13** The third side must be 7 cm. It is not possible to have a triangle with 3 cm, 3 cm and 7 cm sides because the sum of the length of every two sides has to be longer than the third side.
Perimeter: $7\text{ cm} + 7\text{ cm} + 3\text{ cm} = 17\text{ cm}$
The perimeter is 17 cm.
-

- 14** $18\text{ cm} - 14\text{ cm} = 4\text{ cm}$ (total length of both widths)
 $4\text{ cm} \div 2 = 2\text{ cm}$
 $2\text{ cm} \times 7\text{ cm} = 14\text{ cm}^2$
The area is 14 cm^2 .

Students may also use square grid paper and draw the rectangle to determine the width.

- 15** The width must be 1 unit.
The perimeter is 24 units.

8 (b)

