

Time, Liquid Volume, and Mass: practice solutions, Grade 3 – download the PDF

Written solutions to the chapter problems. Check each step, then correct yourself.

1 Read the clock



(a) The hour hand has just passed 3, and the minute hand is two marks past the 8. The 8 stands for 40 minutes, so the time is **3:42**.

(b) $60 - 42 = 18$. It is **18 minutes** until 4:00.

2 Counting by fives



Count by fives: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55.

(a) The 7: **35 minutes**. (b) The 9: **45 minutes**. (c) The 4: **20 minutes**. (d) The 11: **55 minutes**.

3 Another clock



The hour hand is just past the 6, so the hour is 6. The minute hand is three marks past the 3. The 3 stands for 15 minutes, and three marks make 18 minutes. The time is **6:18**, which is **18 minutes** after 6:00.

4 A short movie



From 4:10 to 4:50, count the minutes: $50 - 10 = 40$.

The cartoon lasts **40 minutes**.

5 Convert the units



Remember $1 \text{ L} = 1,000 \text{ mL}$ and $1 \text{ kg} = 1,000 \text{ g}$.

(a) $3 \times 1,000 = 3,000 \text{ mL}$. (b) $5,000 \div 1,000 = 5 \text{ L}$. (c) $2 \times 1,000 = 2,000 \text{ g}$. (d) $4,000 \div 1,000 = 4 \text{ kg}$.

6 Choose the best unit



(a) A spoonful is very small: **mL**. (b) A bathtub holds a lot of water: **L**. (c) A paper clip is very light: **g**. (d) A watermelon is heavy: **kg**.

7 Read the beaker



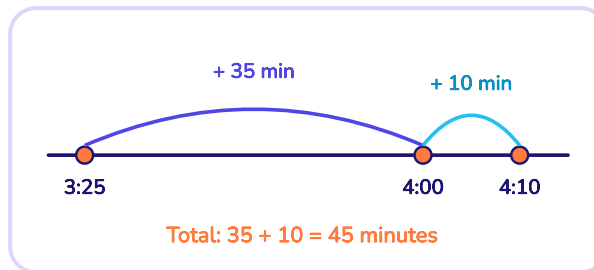
(a) The level is halfway between the 300 mark and the 400 mark, so the beaker holds **350 mL**.

(b) $500 - 350 = 150$. You need **150 mL** more.

8

Soccer practice

Jump along a number line.



From 3:25 to 4:00 is 35 minutes. From 4:00 to 4:10 is 10 minutes. $35 + 10 = 45$.

Practice lasts **45 minutes**.

9

When did the bus leave?

Go backward from 8:20. First jump back 20 minutes to 8:00. Then jump back $35 - 20 = 15$ more minutes to 7:45.

Check: 7:45 plus 35 minutes is 8:20.

The bus left at **7:45 a.m.**

10

Cookies in the oven

From 5:40, jump 20 minutes to 6:00. There are $25 - 20 = 5$ minutes left to add, so the time is 6:05.

She should take them out at **6:05 p.m.**

11

The lemonade pitcher

Lemonade poured: $4 \times 250 = 1,000$ mL.

The pitcher held $2 \times 1,000 = 2,000$ mL, and $2,000 - 1,000 = 1,000$ mL remain.

There are **1,000 mL** left, which is **1 L**.

12 The backpack



Add: $450 + 275 = 725$, then $725 + 600 = 1,325$.

The total mass is **1,325 g**, which is 1 kg 325 g.

13 True or false?



(a) **True.** $2,000 + 500 = 2,500$ g.

(b) **False.** $3,000 \div 1,000 = 3$, so 3,000 mL is 3 L.

(c) **True.** 4 kg is 4,000 g, and 4,000 is greater than 3,900.

(d) **False.** 5 kg is exactly 5,000 g, so they have the same mass.

14 The school schedule



(a) Art: 9:10 to 9:55 is $55 - 10 = 45$ minutes. Reading: 10:05 to 10:50 is $50 - 5 = 45$ minutes. Math: 11:00 to 11:50 is **50 minutes**.

(b) **Math** is the longest, with 50 minutes.

(c) From 9:55 to 10:05 is $5 + 5 = 10$ minutes.

15 Homework time



Math: 4:20 plus 25 minutes is 4:45, because $20 + 25 = 45$.

Break: 4:45 plus 10 minutes is 4:55.

Reading: 4:55 plus 30 minutes is 5:25.

She finishes at **5:25 p.m.** The total is $25 + 10 + 30 = 65$ minutes.

16 A big pot of soup



Soup served: $12 \times 250 = 3,000$ mL, which is 3 L.

Soup left: $6 - 3 = 3$ L.

There are 3 L of soup left.

17 The fruit crate



Melons: $4 \times 3 = 12$ kg. Add the grapes: $12 + 5 = 17$ kg.

Room left: $20 - 17 = 3$ kg, and $3 \times 1,000 = 3,000$ g.

The crate can hold 3 kg (3,000 g) more.

18 Make a reasonable estimate



(a) 2 kg: it is heavier than a few paper clips but easy to carry in a bag.

(b) 10 L: 1 mL is a few drops, and 1,000 L is a huge tank.

(c) 4 kg: 400 g is about the mass of two apples, and 40 kg is a large dog.

19 Two jugs and a bowl



Change 1 L 50 mL to $1,000 + 50 = 1,050$ mL.

Total: $1,200 + 1,050 = 2,250$ mL, or 2 L 250 mL.

The bowl holds 3,000 mL, so the room left is $3,000 - 2,250 = 750$ mL.

The bowl holds 2,250 mL and has 750 mL of room left.

20

The long hike

(a) From 11:50 a.m. to 12:00 p.m. is 10 minutes. From 12:00 to 1:00 p.m. is 60 minutes. From 1:00 to 1:15 is 15 minutes. $10 + 60 + 15 = 85$.

The hike lasts **85 minutes**, which is 1 hour 25 minutes.

(b) $3 \times 750 = 2,250$ mL. They carry **2,250 mL**, which is 2 L 250 mL.

**Test yourself: quick challenge for Grade 3**[Change level](#)

Level : **Grade 3**

6 random questions, instant feedback.

**Start the challenge****Keep exploring with Zyro****Math practice**

Time, Liquid Volume, and Mass: math practice, Grade 3

**Math quizzes**

Time, Liquid Volume, and Mass: math quiz, Grade 3



Math tests

Time, Liquid Volume, and Mass: math test, Grade 3



Math practice

Area and Perimeter: math practice, Grade 3



Math practice

Shapes and Data Displays: math practice, Grade 3



Math quizzes

Area and Perimeter: math quiz, Grade 3

Zyro vous emmène sur nos sites partenaires

Embarquez pour d'autres planètes du savoir et leurs applis.

Décollage