

Grade 3 · Time, Liquid Volume and Mass · Worksheet Answer Key

Common Core 3.MD.A.1, 3.MD.A.2 · mathovore.fr

Every solution below shows the steps: how the hands or the scale are read, how the jumps on a number line add up, and which operation solves each story. Compare your work, and check that each answer has the right unit.

Grade 3 Common Core: 3.MD.A.1 · 3.MD.A.2

Problem 1: Read the clock

The hour hand is between the 2 and the 3, so the hour is 2. The minute hand is on the 7: $7 \times 5 = 35$. The time is **2:35**.

Problem 2: Almost the next hour

The hour hand is almost at the 11 but has not reached it, so the hour is 10. The minute hand is 2 marks past the 10: $10 \times 5 = 50$ and $50 + 2 = 52$. The time is **10:52**.

Problem 3: Ten minutes later

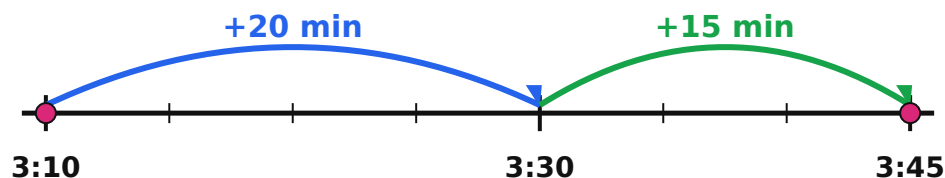
Count on 10 minutes: $25 + 10 = 35$. The clock will show **8:35**.

Problem 4: Count by fives and ones

$9 \times 5 = 45$ and $45 + 3 = 48$. It is **48 minutes** after the hour.

Problem 5: Class on a number line

Jump from 3:10 to 3:30: 20 minutes. Jump from 3:30 to 3:45: 15 minutes. $20 + 15 = 35$.



Two jumps make 35 minutes.

The elapsed time is **35 minutes**.

Problem 6: Movie length

Both times are in the same hour, so subtract the minutes: $58 - 20 = 38$. Check on a number line: 10 minutes to 1:30, then 28 more minutes to 1:58, and $10 + 28 = 38$. The movie is **38 minutes** long.

Problem 7: Finish time

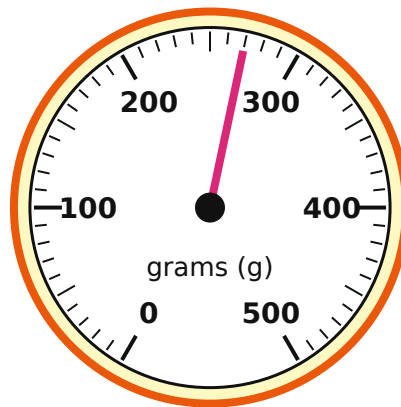
Jump 5 minutes from 4:25 to 4:30. Then jump 30 more minutes to 5:00. $5 + 30 = 35$. She finishes at **5:00**.

Problem 8: Start time

Jump back 15 minutes from 6:15 to 6:00. Then jump back 25 more minutes to 5:35. $15 + 25 = 40$. Ethan started at **5:35**.

Problem 9: Read the scale

The needle is past 200. The small marks go up by 10. It is 7 marks past 200: $200 + 70 = 270$.



Reading: 270 g

The needle points to 270 grams.

The scale shows **270 grams**.

Problem 10: Grams or kilograms

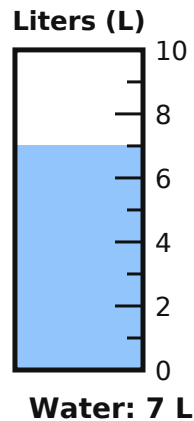
- a. A grape is very light: **grams**.
- b. A watermelon is heavy: **kilograms**.
- c. A pencil is light: **grams**.

Problem 11: Liters or grams

- a. Milk is a liquid: **liters**.
- b. A feather is very light: **grams**.
- c. Bathtub water is a liquid: **liters**.

Problem 12: Read the beaker

The labeled marks go 0, 2, 4, 6, 8. The water stops 1 mark above 6, so it is at 7.



The water level is at 7 liters.

The beaker holds **7 liters**.

Problem 13: Compare two beakers

Beaker A has 4 liters. Beaker B has 9 liters. Subtract: $9 - 4 = 5$. Beaker B has **5 more liters**.

Problem 14: Cat and dog

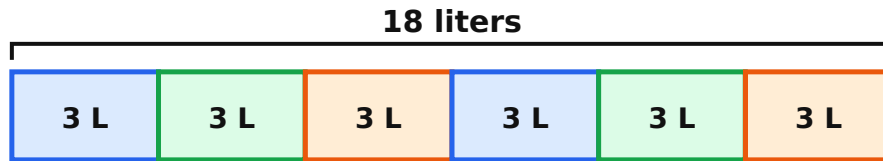
Put the masses together: $4 + 19 = 23$. The total is **23 kilograms**.

Problem 15: Draining the tub

$52 - 19 = 33$ (take away 20, then add 1 back: $52 - 20 = 32$ and $32 + 1 = 33$). **33 liters** are left.

Problem 16: Fish bowls

There are 6 equal groups of 3 liters: $6 \times 3 = 18$.



6 groups of 3 liters make 18 liters.

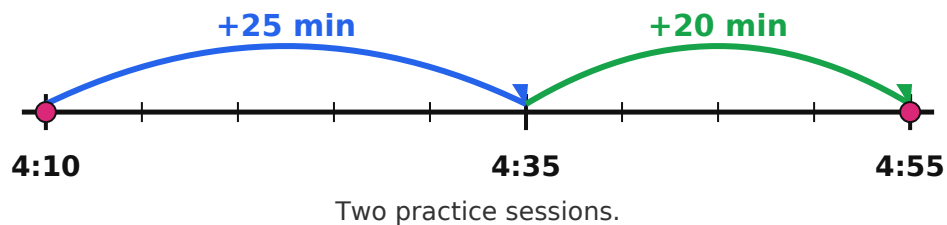
Jamal uses **18 liters**.

Problem 17: Boxes of books

Share equally: $28 \div 4 = 7$, because $4 \times 7 = 28$. Each box has a mass of **7 kilograms**.

Problem 18: Music practice

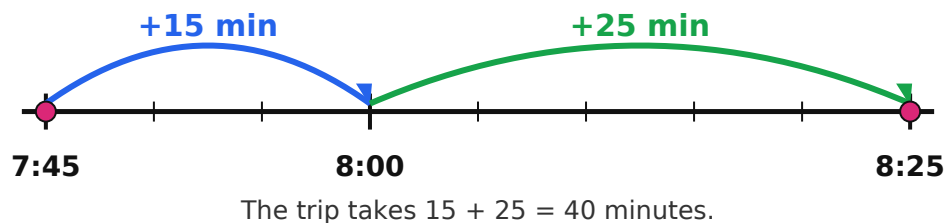
Add the minutes first: $25 + 20 = 45$. Start at 4:10 and jump 25 minutes to 4:35. Then jump 20 more minutes to 4:55.



Aisha stops at **4:55**.

Problem 19: Trip to school

Jump 15 minutes from 7:45 to 8:00. Then jump 25 more minutes to 8:25.



Diego gets to school at **8:25 AM**.

Problem 20: Bags of apples

There are 7 equal groups of 3 kilograms: $7 \times 3 = 21$.



7 groups of 3 kilograms make 21 kilograms.

The apples have a mass of **21 kilograms**.

Problem 21: Sharing a tank

$36 \div 9 = 4$, because $9 \times 4 = 36$. Each container gets **4 liters**.

Problem 22: Baking recipe

$250 + 175 = 425$ ($250 + 100 = 350$, then $350 + 75 = 425$). The total is **425 grams**.