

Grade 3 - Scaled Graphs and Line Plots - Answer Key

Common Core 3.MD.B.3, 3.MD.B.4 · maths-pdf.fr/en/

This **graphs practice solutions** for 3rd Grade covers scaled graphs and line plots (Common Core 3.MD.B.3, 3.MD.B.4), with a free PDF to print.

Here are the full solutions for the graphs and line plots worksheet. For every graph problem, check the key or scale first, because most mistakes happen when a student counts each symbol as 1.

Grade 3 · Common Core State Standards: **3.MD.B.3, 3.MD.B.4**

Graphs practice solutions: exercises 1 to 10

Exercise 1 - Read the picture graph

Blue has 3 whole stars and 1 half star. $3 \times 4 = 12$ and $12 + 2 = 14$. The Blue team read **14 books**.

Books Read in March



 Key: each star = 4 books; half star = 2 books

Blue: $12 + 2 = 14$ books.

Exercise 2 - Stars for a total

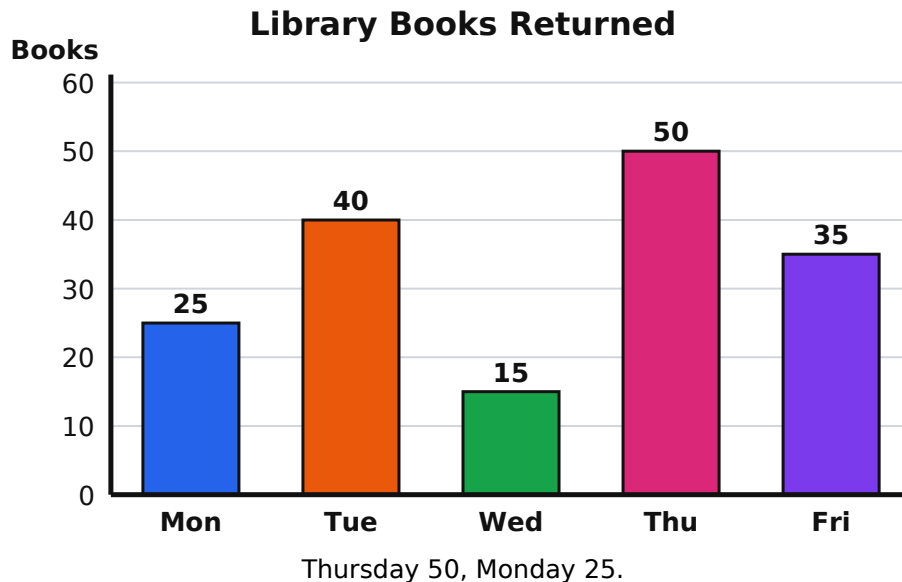
- a. $35 \div 5 = 7$, so **7 stars**.
- b. $25 \div 5 = 5$, so **5 stars**.

Exercise 3 - Read the bar graph

The top of the Banana bar is on the line for 35. **35 students** chose bananas.

Exercise 4 - How many more pages

Thursday is at the line for 50. Monday is halfway between 20 and 30, which is 25. $50 - 25 = 25$. Thursday has **25 more books**.



Exercise 5 - Halfway on the scale

Halfway between 20 and 30 is $20 + 5 = 25$. The bar shows **25**.

Exercise 6 - Measure the crayon

The crayon ends at the half-inch mark after 4. Its length is $4\frac{1}{2}$ inches, or **$4\frac{1}{2}$ inches**.

Exercise 7 - Measure the pencil

The pencil ends 3 short marks after the 4. $3 \text{ fourths} = \frac{3}{4}$. The length is $4\frac{3}{4}$ **inches**.

Exercise 8 - Count the marks

Each inch has 4 fourths. $2 \times 4 = 8$ and $8 + 1 = 9$. The ribbon is **9 fourth-inch marks** long.

Exercise 9 - Read the line plot

Count the Xs above 2. There are **3 leaves**.

Exercise 10 - Longer than the mark

Lengths greater than $1\frac{1}{2}$ are: one at $1\frac{3}{4}$, three at 2, one at $2\frac{1}{2}$, and one at 3. $1 + 3 + 1 + 1 = 6$. **6 pieces** are longer.

Exercises 11 and up

Exercise 11 - Build a line plot

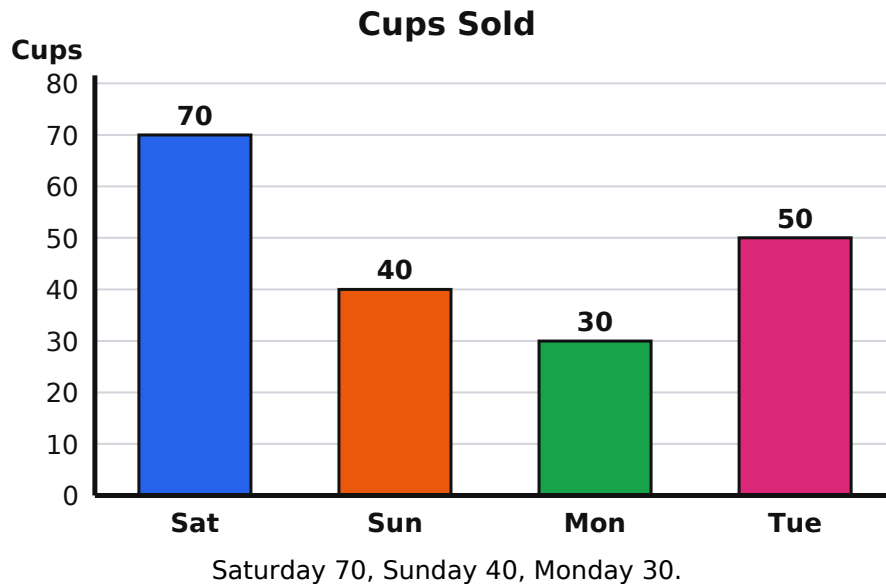
Count the shells that measure $1\frac{1}{4}$. They are the 1st, 3rd, and 6th shells. There are **3 Xs**.

Exercise 12 - Picture graph with halves

- a. Room 3: 55 cans. Room 2: 30 cans. $55 - 30 = 25$. **25 more cans.**
- b. $45 + 30 + 55 + 20 = 150$. **150 cans** in all.

Exercise 13 - Cups of lemonade

- a. $70 + 40 = 110$. **110 cups.**
- b. $70 - 30 = 40$. **40 fewer cups.**



Exercise 14 - Sports votes

$7 \times 4 = 28$ and $4 \times 4 = 16$. $28 - 16 = 12$. **12 more students** chose swimming.

Exercise 15 - Street fair

Maple is 35. $60 - 35 = 25$. **25 more people** are on Oak Street.

Exercise 16 - Book fair

Room A: $3 \times 8 = 24$ and $24 + 4 = 28$. Room B: $5 \times 8 = 40$. $28 + 40 = 68$. **68 books.**

Exercise 17 - Pencil lengths

- a. $3+5+2=10$. **10 pencils.**
- b. $5+2=7$. **7 pencils** are longer than 4 inches.

Exercise 18 - Raffle tickets

- a. $35+20+30=85$. **85 tickets.**
- b. $20+30=50$ and $50-35=15$. **15 more tickets.**

Exercise 19 - Reading minutes

- a. $14+8=22$. **22 books.**
- b. $14-8=6$. **6 more books.**

Exercise 20 - Pizza slices

Tuesday: $6 \times 2 = 12$ and $12+1=13$. Wednesday: $9 \times 2 = 18$. $18-13=5$. **5 more slices.**

Key facts behind this graphs practice solutions

Key facts

- The key tells what one symbol is worth; a half symbol is worth half.
- On a bar graph, read the scale before reading a bar.
- A bar halfway between two lines is halfway between their values.
- A ruler is marked in inches, halves, and fourths.
- On a line plot, each X is one measurement.

How to use this graphs practice solutions

Cover each solution, solve the exercise again, then uncover it and compare every line. If your answer differs, find the first step that changed and redo the exercise from there.

Download the graphs practice solutions as a PDF with the button below and keep it with your notes.