

Fractions on a Number Line

25 practice questions · Grade 1-2 · Free from SOMATH — School of Math

How to work this packet

The 25 questions below march from reading a fraction that's already on a number line, to placing a fraction on a blank number line, to spotting equivalent fractions, to comparing, and finish with real-life word problems. Each question has room to show work. Answers are on the last page — recommended parents cover the answer page while the child works.

Three rules to remember

1. The bottom number splits. The denominator tells you how many EQUAL parts to split the line from 0 to 1 into.
2. The top number counts. Starting at 0, count that many ticks. That's where the fraction lives.
3. Farther from 0 = bigger. On a number line, the fraction to the right is the bigger one.

Part 1 — Reading fractions on a number line

Q1 A number line goes from 0 to 1 and is split into 4 equal parts. Starting at 0, count 1 tick. What fraction is that point?

Q2 A number line from 0 to 1 is split into 3 equal parts. Starting at 0, count 2 ticks. What fraction is that point?

Q3 A number line from 0 to 1 is split into 6 equal parts. What fraction lands exactly at the middle?

Q4 A number line from 0 to 1 is split into 8 equal parts. What fraction lands right before 1 (the very last tick)?

Q5 A number line from 0 to 1 is split into 2 equal parts. What fraction is the tick between 0 and 1?

Part 2 — Placing fractions on a number line

Q6 Draw a number line from 0 to 1 with 4 equal parts. Which tick is $\frac{3}{4}$?

Q7 Draw a number line from 0 to 1 with 5 equal parts. Which tick is $\frac{2}{5}$?

Q8 On a number line split into 3 equal parts from 0 to 1, where does $\frac{1}{3}$ land?

Q9 On a number line split into 6 equal parts from 0 to 1, where does $\frac{5}{6}$ land?

Q10 On a number line split into 4 equal parts from 0 to 1, where does $\frac{0}{4}$ land?

Part 3 — Equivalent fractions on a number line

Q11 Draw two number lines from 0 to 1. Split one into 2 equal parts. Split the other into 4 equal parts. Which fraction on the 4-line lands exactly at $\frac{1}{2}$?

Q12 Which fraction on a 6-line matches $\frac{1}{2}$?

Q13 Which fraction on a 6-line matches $\frac{1}{3}$?

Q14 Which fraction on an 8-line matches $\frac{1}{4}$?

Q15 Which fraction on an 8-line matches $\frac{1}{2}$?

Part 4 — Comparing on a number line

Q16 On a 4-line from 0 to 1, which is farther from 0: $\frac{1}{4}$ or $\frac{3}{4}$?

Q17 Which is bigger, $\frac{2}{3}$ or $\frac{1}{3}$? Show how you know using a number line split into 3 equal parts.

Q18 Which is bigger, $\frac{3}{4}$ or $\frac{1}{2}$? Draw both on a number line from 0 to 1.

Q19 Which is bigger, $\frac{5}{6}$ or $\frac{2}{3}$?

Q20 Which is bigger, $\frac{7}{8}$ or $\frac{3}{4}$?

Part 5 — Word and picture problems

Q21 A snail crawls from 0 to 1 meter on a straight path. The path is marked in 4 equal parts. The snail stops at the 3rd mark. What fraction of the path did it crawl?

Q22 A pizza-parlor ruler is 1 foot long and split into 6 equal parts. A stripe of paint runs from 0 to the 4th mark. What fraction of the ruler is painted?

Q23 Emma jumps along a hopscotch line from 0 to 1 meter. She lands on the 2nd mark of a line split into 5 equal parts. What fraction shows her landing spot?

Q24 Two friends run a 1-block race. The block is 8 equal parts long. Jake stops at $\frac{5}{8}$ and Mia stops at $\frac{3}{4}$. Who is farther from the start?

- Q25** A ribbon is 1 meter long and cut into 4 equal pieces. Alex takes 1 piece and Sam takes 2 pieces. On a number line from 0 to 1, mark the point that shows how much they took together as a fraction.

ANSWER KEY

Answers — Fractions on a Number Line

Little Newtons Class 35 · 25 practice questions

Q	Answer	Q	Answer
1	$\frac{1}{4}$	14	$\frac{2}{8}$
2	$\frac{2}{3}$	15	$\frac{4}{8}$
3	$\frac{3}{6}$ (= $\frac{1}{2}$)	16	$\frac{3}{4}$
4	$\frac{7}{8}$	17	$\frac{2}{3}$
5	$\frac{1}{2}$	18	$\frac{3}{4}$
6	3rd tick from 0 ($\frac{3}{4}$)	19	$\frac{5}{6}$
7	2nd tick from 0 ($\frac{2}{5}$)	20	$\frac{7}{8}$
8	1st tick from 0 ($\frac{1}{3}$)	21	$\frac{3}{4}$ of the path
9	5th tick from 0 ($\frac{5}{6}$)	22	$\frac{4}{6}$ (= $\frac{2}{3}$) of the ruler
10	at 0	23	$\frac{2}{5}$
11	$\frac{2}{4}$	24	Mia ($\frac{3}{4} = \frac{6}{8}$, and $\frac{6}{8} > \frac{5}{8}$)
12	$\frac{3}{6}$	25	$\frac{3}{4}$
13	$\frac{2}{6}$		

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Source: Aligned with Common Core 3.NF.A.2 (fractions on a number line, introduced ahead of schedule in grades 1–2) and prep for Kid Einsteins Class 9 fractions. Full teaching version with theory, diagrams, and click-to-reveal step-by-step answers: schoolofmath.us/posts/fractions-on-a-number-line-little-newtons.