

Grade 3 · Understanding Fractions · Worksheet

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

Name: _____ Date: ____/____/____ Score: _____

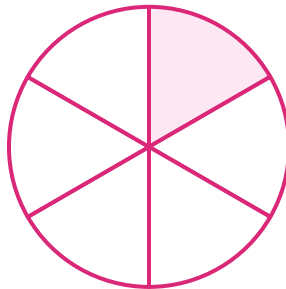
These 23 problems practice unit fractions, naming fractions of a whole, and placing fractions on a number line from standards 3.NF.A.1 and 3.NF.A.2. The first problems use circles, bars, and rectangles cut into equal parts.

Later problems use number lines cut into thirds, sixths, and eighths, then move to word problems about sandwiches, a garden, brownies, and a hiking trail. Show every step.

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

Problem 1: Unit fraction of a pie

The circle is cut into equal parts. Write the unit fraction that names the shaded part.



A circle cut into equal parts.

Problem 2: Equal parts or not

Decide whether the bar is cut into fourths. Explain your answer.



A bar with 4 parts.

Problem 3: Name the shaded fraction

Write the fraction that names the shaded part of the bar.



A bar cut into equal parts.

Problem 4: Shade a fraction

The bar is cut into equal parts. Shade $\frac{2}{3}$ of the bar.



A bar cut into 3 equal parts.

Problem 5: Fractions in words

- Write $\frac{3}{4}$ in words.
- Write $\frac{1}{5}$ in words.
- Write seven-eighths using numbers.

Problem 6: Numerator and denominator

Look at the fraction $\frac{5}{8}$.

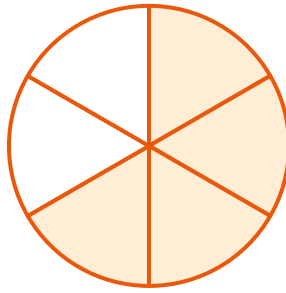
- Name the numerator.
- Name the denominator.
- Tell what the denominator says about the whole.

Problem 7: Counting unit fractions

- How many parts of size $\frac{1}{4}$ make $\frac{3}{4}$?
- How many parts of size $\frac{1}{5}$ make $\frac{3}{5}$?
- $\frac{7}{8}$ is 7 copies of which unit fraction?

Problem 8: Fraction of a circle

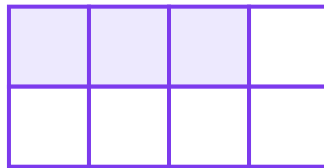
Write the fraction that names the shaded part of the circle.



A circle cut into equal parts.

Problem 9: Fraction of a rectangle

The rectangle is made of equal squares. Write the fraction that names the shaded part.



A rectangle with 4 columns and 2 rows of equal squares.

Problem 10: The part not shaded

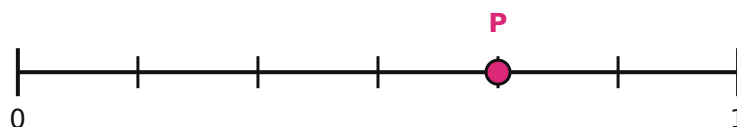
Write the fraction of the bar that is *not* shaded.



A bar cut into equal parts.

Problem 11: Name the point

The number line from 0 to 1 is cut into equal parts. Write the fraction that names point P.



Point P on a number line.

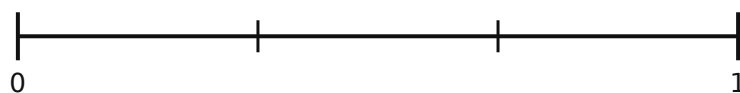
Problem 12: Length of each part

A number line from 0 to 1 is cut into equal parts. Write the length of one part.

- a. It is cut into 6 equal parts.
- b. It is cut into 8 equal parts.
- c. It is cut into 3 equal parts.

Problem 13: Plot a fraction

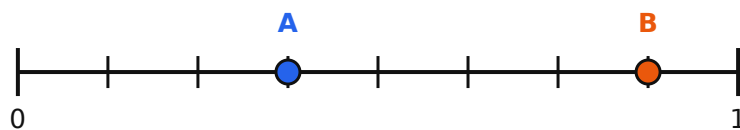
The number line is cut into equal parts. Draw a point at $\frac{2}{3}$.



A number line from 0 to 1.

Problem 14: Two points

Write the fractions that name point A and point B.



A number line from 0 to 1 cut into 8 equal parts.

Problem 15: Hops on a number line

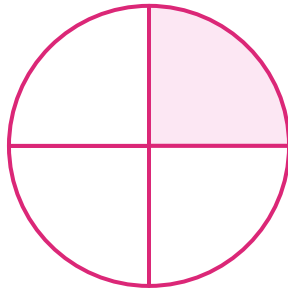
- a. Start at 0 and hop 5 times. Each hop is $\frac{1}{6}$ long. Where do you land?
- b. Start at 0 and hop 3 times. Each hop is $\frac{1}{4}$ long. Where do you land?

Problem 16: Build the fraction

- a. Write the fraction with numerator 3 and denominator 8.
- b. Write the unit fraction with denominator 5.
- c. A whole is cut into 7 equal parts. Write the fraction for 2 of the parts.

Problem 17: Find the mistake

Ethan says the shaded part of the circle is $\frac{1}{3}$ because 1 part is shaded and 3 parts are not shaded. Explain his mistake and write the correct fraction.



A circle cut into equal parts.

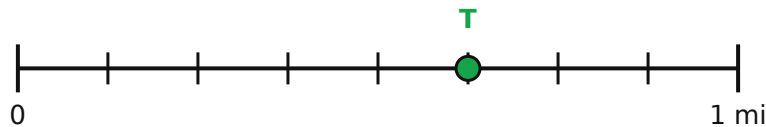
Problem 18: Sofia's sandwich

Sofia cuts a sandwich into 4 equal pieces. She eats 3 pieces.

- What fraction of the sandwich does Sofia eat?
- What fraction of the sandwich is left?

Problem 19: Hiking trail

A trail is 1 mile long. Markers cut the trail into 8 equal parts. Mei walks from the start to the picnic table at point T. What fraction of a mile does Mei walk?



The trail from 0 miles to 1 mile.

Problem 20: Jamal's garden

Jamal's garden has 8 equal sections. He plants tomatoes in 5 sections and peppers in the rest.

- What fraction of the garden has tomatoes?
- What fraction of the garden has peppers?

Problem 21: Bake sale brownies

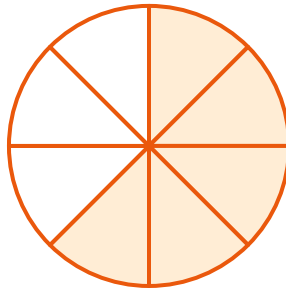
Priya cuts a pan of brownies into 6 equal pieces. At the bake sale she sells 5 pieces.

- What fraction of the pan does Priya sell?
- What unit fraction of the pan is left?

Problem 22: Pizza night

A pizza is cut into 8 equal slices. Liam eats 2 slices and Aisha eats 3 slices. The shaded slices in the picture were eaten.

- What fraction of the pizza does Aisha eat?
- What fraction of the pizza do Liam and Aisha eat together?
- What fraction of the pizza is left?



Five of the eight equal slices were eaten.

Problem 23: Ethan's paper strip

Ethan cuts a paper strip into 3 equal parts. He colors 2 parts red.

- What unit fraction names one part of the strip?
- What fraction of the strip is red?
- How many parts of size $\frac{1}{3}$ are red?