

Same Spot, Same Part

Find fractions that name the same amount.

GRADE 3 • TEKS 3.3.G

3.3.G “explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model; and”

NAME _____

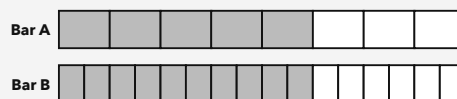
DATE _____

EQUIVALENT FRACTIONS

Fractions are equivalent when they name the same amount of one same-size whole. On a number line, equivalent fractions are at the same point. You can also see equivalent fractions when equal-sized bars have the same amount shaded.

WORKED EXAMPLE

Look at the two same-length bars. Are the shaded fractions equivalent?



1. Bar A has 5 of 8 equal parts shaded, so it shows $\frac{5}{8}$.
2. Bar B has 10 of 16 equal parts shaded, so it shows $\frac{10}{16}$.
3. The shaded amount is the same on both same-length bars.

Answer: Yes, $\frac{5}{8} = \frac{10}{16}$.

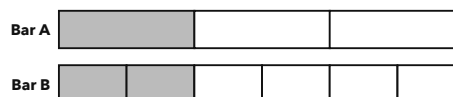
PRACTICE 6 problems

- 1** Use the number line. Write two fractions that name point M.



ANSWER _____

- 2** Look at the two same-length bars. Do the shaded parts show equivalent fractions? Write the equation.



ANSWER _____

- 3** Fill in the blank: $\frac{3}{4} = \frac{\quad}{12}$

ANSWER _____

- 4** Which fraction is equivalent to $\frac{2}{3}$? A. $\frac{4}{6}$ B. $\frac{3}{6}$ C. $\frac{4}{9}$

ANSWER _____

- 5** Are $\frac{2}{4}$ and $\frac{3}{6}$ equivalent? Write yes or no.

ANSWER _____

- 6** Are $\frac{1}{2}$ and $\frac{2}{6}$ equivalent? Write yes or no. Then explain why.

ANSWER _____

APPLY IT Show your work

- 1** During video-game design club, Jalen finishes $\frac{3}{4}$ of a same-size game map. Priya finishes $\frac{9}{12}$ of another same-size game map. Did they finish equivalent portions? Explain.

WORK SPACE

ANSWER _____

- 2** At a bake sale, Rosa packs $\frac{2}{3}$ of a same-size tray of brownies. Eli packs $\frac{4}{6}$ of another same-size tray. Did they pack equivalent portions? Explain.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Amir says that $\frac{2}{4}$, $\frac{3}{6}$, and $\frac{4}{9}$ are all equivalent to $\frac{1}{2}$. Which fractions are equivalent to $\frac{1}{2}$? Explain why the other fraction is different.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Use the number line. Write two fractions that name point M.	$\frac{1}{2}$ and $\frac{2}{4}$
2	Look at the two same-length bars. Do the shaded parts show equivalent fractions? Write the equation.	Yes, $\frac{1}{3} = \frac{2}{6}$.
3	Fill in the blank: $\frac{3}{4} = \frac{\quad}{12}$	9
4	Which fraction is equivalent to $\frac{2}{3}$? A. $\frac{4}{6}$ B. $\frac{3}{6}$ C. $\frac{4}{9}$	A. $\frac{4}{6}$
5	Are $\frac{2}{4}$ and $\frac{3}{6}$ equivalent? Write yes or no.	Yes
6	Are $\frac{1}{2}$ and $\frac{2}{6}$ equivalent? Write yes or no. Then explain why.	No. $\frac{1}{2}$ is one half, and $\frac{2}{6}$ is one third.

PART 2 • APPLY IT

1. **Yes. $\frac{3}{4} = \frac{9}{12}$, so they finished the same portion.** Split each fourth into 3 equal parts. Then $\frac{3}{4}$ becomes $\frac{9}{12}$.
2. **Yes. $\frac{2}{3} = \frac{4}{6}$, so they packed the same portion.** Each third can be split into 2 equal parts. Then $\frac{2}{3}$ becomes $\frac{4}{6}$.

CHALLENGE

$\frac{2}{4}$ and $\frac{3}{6}$ are equivalent to $\frac{1}{2}$. They each name one half of the whole. $\frac{4}{9}$ does not name one half.

Accept any correct pair of fractions for point M, including equivalent forms that name one half. For explanations, accept language that says the fractions show the same portion of same-size wholes or the same point on a number line.