

Fraction Form Switch

Connect fractions, mixed numbers, number lines, models, and percents.

GRADE 6 • 6.NS.1.c

6.NS.1.c "Represent and determine equivalencies among fractions (proper or improper) and mixed numbers that have denominators that are 12 or less or factors of 100 and percents incorporating the use of number lines..."

NAME _____

DATE _____

SAME VALUE, NEW FORM

Equivalent fractions, mixed numbers, and percents name the same amount in different ways. To write a fraction as a percent, make an equivalent fraction with a denominator of 100 when possible. To change an improper fraction to a mixed number, divide the numerator by the denominator.

WORKED EXAMPLE

Write $9/25$ as a percent.

1. $25 \times 4 = 100$.

2. $9 \times 4 = 36$, so $9/25 = 36/100$.

3. $36/100 = 36\%$.

Answer: 36%

PRACTICE 6 problems

1 Write $1/4$ as a percent.

ANSWER _____

2 Write 75% as a fraction in simplest form.

ANSWER _____

3 Write $7/2$ as a mixed number.

ANSWER _____

4 Write $3 \frac{1}{6}$ as an improper fraction.

ANSWER _____

5 A number line from 0 to 1 is divided into 7 equal intervals. Point P is at the sixth tick after 0. Write P as a fraction and a percent.

ANSWER _____

6 A bar is split into 12 equal parts. Eleven parts are shaded. Write the shaded amount as a fraction and a percent.

ANSWER _____

APPLY IT Show your work

- 1** A gaming club has 40 members. Thirty-five percent of the members choose the puzzle game. Write 35% as a fraction in simplest form. Then find how many members choose the puzzle game.

WORK SPACE

ANSWER _____

- 2** A music rehearsal lasts 2 hours. Jordan practices for $1\frac{3}{4}$ hours. What percent of the full rehearsal does Jordan practice?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A point on a number line is at $1\frac{7}{10}$. Eli says that $\frac{170}{100}$ and 170% name the same point. Is Eli correct? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write $\frac{1}{4}$ as a percent.	25%
2	Write 75% as a fraction in simplest form.	$\frac{3}{4}$
3	Write $\frac{7}{2}$ as a mixed number.	$3 \frac{1}{2}$
4	Write $3 \frac{1}{6}$ as an improper fraction.	$\frac{19}{6}$
5	A number line from 0 to 1 is divided into 7 equal intervals. Point P is at the sixth tick after 0. Write P as a fraction and a percent.	$\frac{6}{7}$ and $85 \frac{5}{7}\%$
6	A bar is split into 12 equal parts. Eleven parts are shaded. Write the shaded amount as a fraction and a percent.	$\frac{11}{12}$ and $91 \frac{2}{3}\%$

PART 2 • APPLY IT

- $\frac{7}{20}$; 14 members** $35\% = \frac{35}{100} = \frac{7}{20}$. Find 35% of 40, or multiply 40 by $\frac{7}{20}$, to get 14.
- 87.5%** Write $1 \frac{3}{4}$ as $\frac{7}{4}$. Then $(\frac{7}{4})$ divided by 2 = $\frac{7}{8} = 87.5\%$.

CHALLENGE

Yes. $1 \frac{7}{10} = \frac{17}{10} = \frac{170}{100}$, and $\frac{170}{100} = 170\%$.

Accept equivalent fraction forms when the requested form is not specified, but require simplest form when the problem asks for it. Accept fractional percents, such as $85 \frac{5}{7}\%$, as exact answers.