

Percent Model Match

Show benchmark percents in models and fractions.

GRADE 6 • TEKS 6.4.F

6.4.F "represent benchmark fractions and percents such as 1%, 10%, 25%, 33 $\frac{1}{3}$ %, and multiples of these values using 10 by 10 grids, strip diagrams, number lines, and numbers;"

NAME _____

DATE _____

SEE THE PARTS

A percent tells how many parts out of 100. On a 10 by 10 grid, write the shaded amount as a fraction out of 100, then simplify it. Strip diagrams and number lines show the same amount in equal parts.

WORKED EXAMPLE

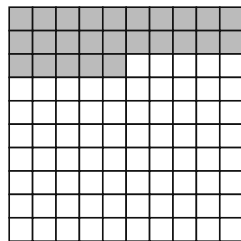
Write 60% as a fraction in simplest form.

1. $60\% = 60/100$.
2. Divide both terms by 20.
3. $60/100 = 3/5$.

Answer: 60% = 3/5

PRACTICE 4 problems

- 1** Use the grid. Write the shaded amount as a percent and a simplest fraction.



ANSWER _____

- 2** Use the strip. Write the shaded amount as a percent and a fraction.



ANSWER _____

- 3** Point P is on a percent number line. Write P as a percent and as a fraction of 100.



ANSWER _____

- 4** Write 10% as a fraction in simplest form.

ANSWER _____

APPLY IT Show your work

- 1** A game club has 80 players. Twenty-five percent earn a new badge. How many players earn the badge?

WORK SPACE

ANSWER _____

- 2** Mia has a playlist of 24 songs. The tape shows 3 equal parts. If $33\frac{1}{3}\%$ are calm songs, how many calm songs are there?

Playlist

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24 songs

ANSWER _____

CHALLENGE One step up

A club has 72 members. Twenty-five percent choose art, and $33\frac{1}{3}\%$ choose music. Everyone else chooses sports. How many choose sports? Show the two parts you subtract.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Use the grid. Write the shaded amount as a percent and a simplest fraction.	25%; 1/4
2	Use the strip. Write the shaded amount as a percent and a fraction.	33 1/3%; 1/3
3	Point P is on a percent number line. Write P as a percent and as a fraction of 100.	1%; 1/100
4	Write 10% as a fraction in simplest form.	1/10

PART 2 • APPLY IT

1. **20 players** $25\% = 1/4$. Divide 80 by 4 to get 20.
2. **8 songs** $33 \frac{1}{3}\% = 1/3$. Divide 24 by 3 to get 8.

CHALLENGE

72 - 18 - 24 = 30 members choose sports.

Accept equivalent fractions, such as $25/100$ for 25% and $10/100$ for 10%, when a simplest fraction is not specifically required. For $33 \frac{1}{3}\%$, accept $1/3$ or $33 \frac{1}{3}/100$ only if the student clearly shows it is one third.