

Shade to Share

Match decimal models with fractions.

GRADE 5 • 5.NS.1.b

5.NS.1.b "Use concrete and pictorial models to represent decimals in their equivalent fraction form (thirds, eighths, and factors of 100)."

NAME _____

DATE _____

SEE THE PARTS

Count shaded equal parts. On a 100-square grid, write shaded squares over 100. On strips split into 3 or 8 parts, write shaded parts over 3 or 8, then match the decimal.

WORKED EXAMPLE

A 100-square grid has 72 shaded squares. Write the decimal and simplest fraction.

1. 72 shaded squares means $72/100$.
2. Write the decimal: 0.72.
3. Simplify $72/100$ by dividing by 4: $18/25$.

Answer: $0.72 = 72/100 = 18/25$

PRACTICE 5 problems

- 1** A strip has 1 of 3 equal parts shaded. Write the decimal and fraction.

ANSWER _____

- 2** A strip has 7 of 8 equal parts shaded. Write the decimal and fraction.

ANSWER _____

- 3** A 100-square grid has 56 shaded squares. Write the decimal and simplest fraction.

ANSWER _____

- 4** A 100-square grid has 25 shaded squares. Write the decimal and simplest fraction.

ANSWER _____

- 5** A strip has 3 of 8 equal parts shaded. Write the decimal and fraction.

ANSWER _____

APPLY IT Show your work

- 1** At a school game booth, 36 of 100 prize tickets are blue. What decimal and simplest fraction of the tickets are blue?

WORK SPACE

ANSWER _____

- 2** Jalen finished 5 of 8 levels in a game. What decimal and fraction of the levels did he finish?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A progress display shows 1 full bar and 3 of 8 parts of the next bar. Write the total as a decimal and an improper fraction.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A strip has 1 of 3 equal parts shaded. Write the decimal and fraction.	$0.333... = 1/3$
2	A strip has 7 of 8 equal parts shaded. Write the decimal and fraction.	$0.875 = 7/8$
3	A 100-square grid has 56 shaded squares. Write the decimal and simplest fraction.	$0.56 = 56/100 = 14/25$
4	A 100-square grid has 25 shaded squares. Write the decimal and simplest fraction.	$0.25 = 25/100 = 1/4$
5	A strip has 3 of 8 equal parts shaded. Write the decimal and fraction.	$0.375 = 3/8$

PART 2 • APPLY IT

1. **$0.36 = 36/100 = 9/25$** Write 36 shaded tickets as $36/100$ and as 0.36 . Divide the fraction by 4 to get $9/25$.
2. **$0.625 = 5/8$** Five eighths is 0.625 because 5 divided by 8 equals 0.625 .

CHALLENGE

$1.375 = 11/8$

Accept equivalent fractions when simplest form is not requested. Accept $0.333...$ for the repeating decimal.