

Parts Past One

Count equal parts to name numbers greater than one.

GRADE 3 • 3.NS.3.c

3.NS.3.c "Use a model of a fraction greater than one to count the fractional parts to name and write it as an improper fraction and as a mixed number (e.g., 14, 24, 34, 44, 54 = 1 14)."

NAME _____

DATE _____

COUNT EVERY PART

The denominator tells how many equal parts make one whole. Count all the fractional parts to write an improper fraction. Then group the parts into wholes to write a mixed number.

WORKED EXAMPLE

A model shows 12 pieces that are each $\frac{1}{7}$ of a whole. Write the amount as an improper fraction and a mixed number.

1. Count 12 seventh-pieces: $\frac{12}{7}$.
2. $\frac{7}{7}$ makes 1 whole.
3. 5 seventh-pieces are left: $\frac{5}{7}$.

Answer: $\frac{12}{7} = 1 \frac{5}{7}$

PRACTICE 6 problems

- 1** A model has 7 pieces, and each piece is $\frac{1}{2}$ of a whole. Write the amount as an improper fraction and a mixed number.

ANSWER _____

- 2** A model has 8 pieces, and each piece is $\frac{1}{3}$ of a whole. Write the amount as an improper fraction and a mixed number.

ANSWER _____

- 3** A model has 11 pieces, and each piece is $\frac{1}{4}$ of a whole. Write the amount as an improper fraction and a mixed number.

ANSWER _____

- 4** A model has 13 pieces, and each piece is $\frac{1}{6}$ of a whole. Write the amount as an improper fraction and a mixed number.

ANSWER _____

- 5** A model has 15 pieces, and each piece is $\frac{1}{8}$ of a whole. Write the amount as an improper fraction and a mixed number.

ANSWER _____

- 6** A model has 17 pieces, and each piece is $\frac{1}{9}$ of a whole. Write the amount as an improper fraction and a mixed number.

ANSWER _____

APPLY IT Show your work

- 1** Jalen's game prize meter has 4 equal sections in each full meter. He lights up 13 sections. Write the amount shown as an improper fraction and a mixed number.

WORK SPACE

ANSWER _____

- 2** Priya's music download bar has 6 equal sections in each full bar. Her songs fill 11 sections. Write the amount filled as an improper fraction and a mixed number.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Model A has 17 pieces that are each $\frac{1}{6}$ of a whole. Model B has 17 pieces that are each $\frac{1}{5}$ of a whole. Which model shows more? Write each amount as an improper fraction and a mixed number. Explain how you know.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A model has 7 pieces, and each piece is $\frac{1}{2}$ of a whole. Write the amount as an improper fraction and a mixed number.	$\frac{7}{2} = 3 \frac{1}{2}$
2	A model has 8 pieces, and each piece is $\frac{1}{3}$ of a whole. Write the amount as an improper fraction and a mixed number.	$\frac{8}{3} = 2 \frac{2}{3}$
3	A model has 11 pieces, and each piece is $\frac{1}{4}$ of a whole. Write the amount as an improper fraction and a mixed number.	$\frac{11}{4} = 2 \frac{3}{4}$
4	A model has 13 pieces, and each piece is $\frac{1}{6}$ of a whole. Write the amount as an improper fraction and a mixed number.	$\frac{13}{6} = 2 \frac{1}{6}$
5	A model has 15 pieces, and each piece is $\frac{1}{8}$ of a whole. Write the amount as an improper fraction and a mixed number.	$\frac{15}{8} = 1 \frac{7}{8}$
6	A model has 17 pieces, and each piece is $\frac{1}{9}$ of a whole. Write the amount as an improper fraction and a mixed number.	$\frac{17}{9} = 1 \frac{8}{9}$

PART 2 • APPLY IT

1. $\frac{13}{4} = 3 \frac{1}{4}$ Thirteen sections that are fourths make $\frac{13}{4}$. Three groups of 4 make 3 whole meters, with 1 fourth left.
2. $\frac{11}{6} = 1 \frac{5}{6}$ Eleven sections that are sixths make $\frac{11}{6}$. One group of 6 makes 1 whole bar, with 5 sixths left.

CHALLENGE

Model B shows more. Model A: $\frac{17}{6} = 2 \frac{5}{6}$. Model B: $\frac{17}{5} = 3 \frac{2}{5}$. Model B has 3 whole groups, while Model A has only 2 whole groups.

Accept equivalent fraction forms when they show the same amount, such as $2 \frac{2}{3}$ for $\frac{8}{3}$. Students should write both an improper fraction and a mixed number for each item.