LESSON MAKER PRO

Fraction Matchups

Use models to rename fractions without changing their value.

GRADE 4 · 4.N.3.1

4.N.3.1 "Represent and rename equivalent fractions using fraction models (e.g., parts of a set, area models, fraction strips, number lines)."

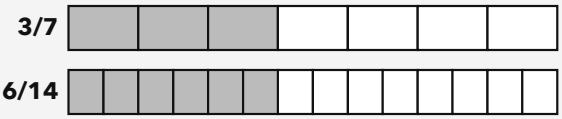
NAME _____ DATE _____

THE BIG IDEA

Equal-length fraction strips can show the same amount with different numbers of parts. If each part is split into smaller equal parts, both the number of shaded parts and the total number of parts change, but the shaded amount stays the same.

WORKED EXAMPLE

The strips show 3/7 and 6/14. How can you tell they are equivalent?



1. Each part of the first strip is split into 2 equal parts in the second strip.
2. The 3 shaded parts become 3 × 2 = 6 shaded parts.
3. The 7 total parts become 7 × 2 = 14 total parts.

Answer: 3/7 = 6/14. Both strips show the same shaded amount.

PRACTICE 6 problems

1 Use the strips to complete 1/4 = ___/8.



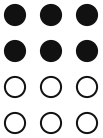
ANSWER _____

2 Use the strips to complete 2/3 = ___/9.



ANSWER _____

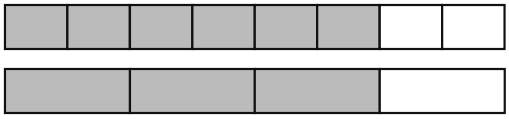
3 What fraction of the dots is shaded? Rename it with a denominator of 2.



ANSWER _____

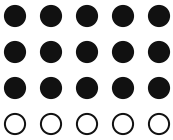
4 Use the strips to complete 6/8 = ___/4.

6/8



ANSWER _____

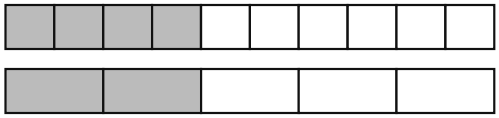
5 What fraction of the dots is shaded? Rename it with a denominator of 4.



ANSWER _____

6 Use the strips to complete 4/10 = ___/5.

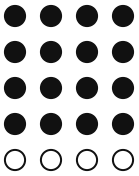
4/10



ANSWER _____

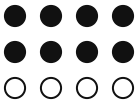
APPLY IT Show your work

1 A class displays 20 game cards. The 16 shaded dots show cards with dragons. What fraction of the cards have dragons? Rename the fraction with a denominator of 5.



ANSWER _____

2 A playlist has 12 songs. The 8 shaded dots show upbeat songs. What fraction of the songs are upbeat? Rename the fraction with a denominator of 3.



ANSWER _____

CHALLENGE One step up

The first strip shows 2/3. How many more parts of the second strip must be shaded to show an equivalent fraction? Explain.

2/3



WORK SPACE AND ANSWER

ANSWER KEY

Fraction Matchups

GRADE 4 · 4.N.3.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the strips to complete 1/4 = ___/8.	**2/8**
2	Use the strips to complete 2/3 = ___/9.	**6/9**
3	What fraction of the dots is shaded? Rename it with a denominator of 2.	**6/12 = 1/2**
4	Use the strips to complete 6/8 = ___/4.	**3/4**
5	What fraction of the dots is shaded? Rename it with a denominator of 4.	**15/20 = 3/4**
6	Use the strips to complete 4/10 = ___/5.	**2/5**

PART 2 · APPLY IT

1. **16/20 = 4/5** There are 16 shaded dots out of 20. Divide both numbers by 4 to get 4/5.
2. **8/12 = 2/3** There are 8 shaded dots out of 12. Divide both numbers by 4 to get 2/3.

CHALLENGE

2 more parts. Since 2/3 = 8/12, the second strip needs 8 shaded parts. It already has 6, so 8 - 6 = 2.

For problems asking for two fractions, accept the fractions written separately if both are correct. In the challenge, accept any explanation showing that 8 of the 12 parts must be shaded.