LESSON MAKER PRO

Fraction Model Match

Use parts of shapes and lengths to find equal fractions.

GRADE 3 · 3.NS.3.h

3.NS.3.h "Represent equivalent fractions with denominators of 2, 3, 4, 5, 6, 8, or 10, using region/area models and length models."

NAME _____ DATE _____

SAME AMOUNT, NEW PARTS

Equivalent fractions name the same amount of a whole or the same point on a length. When every equal part is split into the same number of smaller equal parts, multiply the numerator and denominator by that number.

WORKED EXAMPLE

A length strip has 5 equal parts. 3 parts are shaded. Each part is split into 2 equal smaller parts. Write an equivalent fraction.

1. Start with 3/5.
2. Split each of the 5 parts into 2 smaller parts.
3. There are 10 equal smaller parts.
4. 6 of the smaller parts are shaded.

Answer: 3/5 = 6/10

PRACTICE 6 problems

1 A length strip is split into 4 equal parts. 1 part is shaded. Then every part is split into 2 equal parts. 1/4 = __/8

ANSWER _____

2 An area model is a rectangle split into 2 rows of 5 equal squares. 4 squares are shaded. 4/10 = __/5

ANSWER _____

3 A number line from 0 to 1 is split into 6 equal lengths. A point is at the third mark after 0. 3/6 = __/2

ANSWER _____

4 An area model has 2 rows of 4 equal squares. 6 squares are shaded. 6/8 = __/4

ANSWER _____

5 A length strip is split into 5 equal parts. 2 parts are shaded. Each part is split into 2 equal parts. 2/5 = __/10

ANSWER _____

6 An area model has 3 rows of 2 equal squares. 4 squares are shaded, filling 2 whole rows. 4/6 = __/3

ANSWER _____

APPLY IT Show your work

1 On a scooter safety course, a rider travels 6 of 8 equal sections of the track. What fraction of the track did the rider travel? Write an equivalent fraction in fourths.

WORK SPACE

ANSWER _____

2 For a game badge, Jay puts stars in 4 of 10 equal squares. What fraction of the badge has stars? Write an equivalent fraction in fifths.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A marker sits exactly halfway along a length strip. Write the fraction for the marker if the strip is split into 4 equal lengths and if it is split into 10 equal lengths. Explain how both fractions name the same point.

_____

_____

ANSWER KEY

Fraction Model Match

GRADE 3 · 3.NS.3.h

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A length strip is split into 4 equal parts. 1 part is shaded. Then every part is split into 2 equal parts. 1/4 = __/8	**2/8**
2	An area model is a rectangle split into 2 rows of 5 equal squares. 4 squares are shaded. 4/10 = __/5	**2/5**
3	A number line from 0 to 1 is split into 6 equal lengths. A point is at the third mark after 0. 3/6 = __/2	**1/2**
4	An area model has 2 rows of 4 equal squares. 6 squares are shaded. 6/8 = __/4	**3/4**
5	A length strip is split into 5 equal parts. 2 parts are shaded. Each part is split into 2 equal parts. 2/5 = __/10	**4/10**
6	An area model has 3 rows of 2 equal squares. 4 squares are shaded, filling 2 whole rows. 4/6 = __/3	**2/3**

PART 2 · APPLY IT

1. **6/8 = 3/4** The 8 equal track sections make a length model. Group the sections in pairs, so 6 sections become 3 groups out of 4 groups.
2. **4/10 = 2/5** The 10 equal squares make an area model. Pair the squares, so 4 shaded squares become 2 pairs out of 5 pairs.

CHALLENGE

2/4 and 5/10. Both show the point halfway between 0 and 1.

Accept equivalent fractions that match the stated shaded amount or point. For the challenge explanation, accept wording that identifies both fractions as one-half or as the same halfway point.