Equivalent Fractions Worksheet

Make and simplify equivalent fractions by multiplying or dividing.

NAME _____ DATE _____ SCORE _____

MY GOALS

- **I can practice equivalent fractions.**
- **I can use the word numerator.**
- **I can use the word denominator.**
- **I can use the word simplify.**

LEARN IT

Make and simplify equivalent fractions

Equivalent fractions have the same value but different numerators and denominators. Multiply or divide the numerator and denominator by the same number to make an equivalent fraction. To simplify, divide both numbers by their greatest common factor until no larger factor than 1 remains.

WATCH ME

Find an equivalent fraction to 3/4 by multiplying both numbers.

1. Choose a number to multiply both the numerator and denominator by, for example 2.
2. Multiply top and bottom: 3 × 2 = 6 and 4 × 2 = 8.
3. Write the new fraction: 6/8 is equivalent to 3/4.

ANSWER **6/8**

KEY WORDS

Numerator The top number that shows how many parts you have.

Denominator The bottom number that shows how many equal parts the whole has.

Equivalent fractions Different fractions that represent the same amount.

Simplify Rewrite a fraction with the smallest numbers that show the same value.

REMEMBER

- Multiply or divide both numerator and denominator by the same number to keep the value the same.
- Use the greatest common factor to simplify a fraction to lowest terms.
- Equivalent fractions land on the same point on a number line or shade the same area.

WATCH OUT

Don't add the numerator and denominator - multiply or divide both by the same number.

PART A Warm up

1 FILL IN THE BLANK

Fill in the blank so each fraction is equivalent.

a) 2/5 = _____ /25

b) 1/3 = _____ /9

c) 4/6 = _____ /12

d) 3/8 = _____ /16

PART B Practice

2 SHOW YOUR WORK

Create an equivalent fraction with the given denominator. Write only the missing numerator.

a) 7/10 = _____ /20

b) 5/8 = _____ /32

c) 2/7 = _____ /21

d) 6/9 = _____ /3

3 FILL IN THE BLANK

Look at the two fraction bars. Answer each question about them.



a) How many parts should be shaded in the thirds bar to show 1/3? _____

b) How many parts should be shaded in the sixths bar to show 4/6? _____

c) Are 1/3 and 2/6 equivalent? _____

PART C Apply it

4 WRITE

Explain how to make an equivalent fraction and how to simplify a fraction. Give one example in your answer.

CHECK YOUR WORK

- ☐ I made equivalent fractions by multiplying or dividing both numbers.
- ☐ I simplified a fraction using the greatest common factor.
- ☐ I checked that equivalent fractions have the same value.

HOW DID IT GO? ◯ I can do this on my own ◯ I need a bit more practice ◯ I would like some help

Equivalent Fractions Worksheet

QUESTION	ANSWER	WHY
Question 1	**a) 10 b) 3 c) 8 d) 6**	Multiply numerator and denominator by the same number. 2/5 ×5 = 10/25; 1/3 ×3 = 3/9; 4/6 ×2 = 8/12; 3/8 ×2 = 6/16. Watch for multiplying both top and bottom, not adding.
Question 2	**a) 14 b) 20 c) 6 d) 2**	Scale numerator by the same factor used on the denominator. 7/10 ×2 = 14/20; 5/8 ×4 = 20/32; 2/7 ×3 = 6/21. For 6/9 to make denominator 3 divide both by 3: 6 ÷3 = 2 so 2/3.
Question 3	**a) 1 b) 4 c) yes**	Read the bars' parts. For thirds you shade 1 of 3 to show 1/3. For sixths you shade 4 of 6 to show 4/6. 1/3 equals 2/6 so 1/3 and 2/6 are equivalent.
Question 4	An equivalent fraction is made by multiplying or dividing both the numerator and denominator by the same number so the value doesn't change. To simplify, divide both numbers by their greatest common factor. Example: To make an equivalent fraction to 4/6, divide by GCF 2 to get 2/3; or multiply 2/3 by 2 to get 4/6.	This answer shows the two methods: make equivalents by multiplying or dividing by the same number and simplify by dividing by the GCF, with a clear example converting 4/6 and 2/3.