

Equivalent fractions Worksheet (4th grade)

Mathematics · 4th grade

Name: _____ Date: _____

1. Which fraction is equivalent to $\frac{1}{2}$?

- A. $\frac{1}{3}$
- B. $\frac{2}{4}$
- C. $\frac{3}{6}$
- D. $\frac{4}{8}$

2. What number goes in the box to make the fractions equivalent? $\frac{2}{4} = \frac{3}{\square}$

- A. 5
- B. 6
- C. 7
- D. 8

3. Which of these fractions is equal to $\frac{4}{8}$?

- A. $\frac{1}{4}$
- B. $\frac{1}{2}$
- C. $\frac{2}{3}$
- D. $\frac{3}{4}$

4. If you multiply the top and bottom of $\frac{2}{3}$ by 2, what is the new fraction?

A. $\frac{4}{6}$

B. $\frac{4}{3}$

C. $\frac{2}{6}$

D. $\frac{4}{5}$

5. Which fraction is equivalent to $\frac{5}{10}$?

A. $\frac{1}{5}$

B. $\frac{1}{2}$

C. $\frac{2}{5}$

D. $\frac{3}{5}$

6. To make the fraction $\frac{2}{4}$ equivalent to $\frac{6}{12}$, we multiply the numerator and denominator by ____.

7. The fraction $\frac{3}{5}$ is equivalent to ____.

8. The fraction $\frac{1}{2}$ is equivalent to $\frac{2}{4}$.

☐ True ☐ False

9. The fraction $\frac{3}{4}$ is equivalent to $\frac{3}{8}$.

☐ True ☐ False

10. Find two fractions that are equivalent to $\frac{1}{2}$.

Answer Key

1. Which fraction is equivalent to $\frac{1}{2}$?

Answer: B

To find an equivalent fraction, multiply the top and bottom by the same number. $1 \times 2 = 2$ and $2 \times 2 = 4$, so $\frac{1}{2}$ is the same as $\frac{2}{4}$.

2. What number goes in the box to make the fractions equivalent? $\frac{2}{4} = \frac{3}{\square}$

Answer: B

To get from 2 to 3 in the top number, you add 1 or think of it as 1.5 times. However, a simpler way for grade 4 is to simplify $\frac{2}{4}$ to $\frac{1}{2}$. Then, to get from 1 to 3, you multiply by 3. So you must multiply the bottom 2 by 3, which gives 6.

3. Which of these fractions is equal to $\frac{4}{8}$?

Answer: B

You can simplify $\frac{4}{8}$ by dividing both the top and bottom by 4. 4 divided by 4 is 1, and 8 divided by 4 is 2. So, $\frac{4}{8}$ is the same as $\frac{1}{2}$.

4. If you multiply the top and bottom of $\frac{2}{3}$ by 2, what is the new fraction?

Answer: A

Multiply the top number: $2 \times 2 = 4$. Multiply the bottom number: $3 \times 2 = 6$. The new fraction is $\frac{4}{6}$.

5. Which fraction is equivalent to $\frac{5}{10}$?

Answer: B

To simplify $\frac{5}{10}$, divide the top and bottom by 5. 5 divided by 5 is 1, and 10 divided by 5 is 2. So, $\frac{5}{10}$ is the same as $\frac{1}{2}$.

6. To make the fraction $\frac{2}{4}$ equivalent to $\frac{6}{12}$, we multiply the numerator and denominator by ____.

Answer: 3

Multiplying the numerator 2 by 3 gives 6, and multiplying the denominator 4 by 3 gives 12.

7. The fraction $\frac{3}{5}$ is equivalent to ____.

Answer: $\frac{6}{10}$

Multiplying both the numerator and the denominator of $\frac{3}{5}$ by 2 results in $\frac{6}{10}$.

8. The fraction $\frac{1}{2}$ is equivalent to $\frac{2}{4}$.

Answer: True

Both fractions represent the same amount. If you multiply the top and bottom of $\frac{1}{2}$ by 2, you get $\frac{2}{4}$.

9. The fraction $\frac{3}{4}$ is equivalent to $\frac{3}{8}$.

Answer: False

These fractions are not the same. $\frac{3}{4}$ is a larger amount than $\frac{3}{8}$ because the pieces in $\frac{3}{4}$ are bigger.

10. Find two fractions that are equivalent to $\frac{1}{2}$.

Answer: Two fractions equivalent to $\frac{1}{2}$ are $\frac{2}{4}$ and $\frac{3}{6}$. You can find these by multiplying the top number (numerator) and the bottom number (denominator) by the same number. For example, $1 \times 2 = 2$ and $2 \times 2 = 4$, so $\frac{2}{4}$ is equivalent. Also, $1 \times 3 = 3$ and $2 \times 3 = 6$, so $\frac{3}{6}$ is equivalent.