Name_____ Date_____

# Reducing Fractions or Simplifying Fractions

Reducing (or simplifying) fractions simply means reducing a fraction to the lowest possible terms. You do this by finding an equivalent fraction in which the numerator and the denominator are as small as possible. In other words, when a number is reduced, there should be no number (except the number 1) that can be divided evenly into both the numerator and the denominator. Remember, when discussing fractions, the numerator is the top number. The denominator is the bottom number.

In order to reduce a fraction to its lowest terms, you should divide the numerator and the denominator by their greatest common factor.

Example:

$\frac{400}{500}$ is the same as saying $\frac{4}{5}$

Four hundred and five hundred are both divisible by one hundred. You arrive at four-fifths because you would divide both the numerator and the denominator by one hundred, since one hundred is the greatest common factor.

Sometimes, the numerator is a larger number than the denominator:

$\frac{50}{15}$

In the example above, there are several steps that need to be completed in order to reduce your fraction. First of all, the denominator in a fraction should always be smaller than the numerator. Therefore, our first step would be to divide the numerator by the denominator. How many times does 15 go into 50? Three times. Fifteen goes into fifty three times, with a remainder of 5. We could write this as:

$3\frac{5}{15}$

You can still reduce this fraction further because $\frac{5}{15}$ is has a greatest common factor of 5. 5 is divisible by 5; 15 is also divisible by 5. Therefore, you could simply say:

$3\frac{1}{3}$

$3\frac{1}{3}$ and $\frac{50}{15}$ both mean the same thing.

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# Reducing Fractions or Simplifying Fractions Questions

**Reduce/simplify the following fractions:**

1. $\frac{25}{10}$

_____

2. $\frac{24}{42}$

_____

3. $\frac{6}{3}$

_____

4. $\frac{44}{55}$

_____

5. $\frac{7}{21}$

_____

6. $\frac{12}{16}$

_____

7. $\frac{16}{18}$

_____

8. $\frac{60}{80}$

_____

9. $\frac{90}{30}$

_____

10. $\frac{36}{48}$

_____

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# Reducing Fractions or Simplifying Fractions Answers

**Reduce/simplify the following fractions:**

1. $\frac{25}{10}$

   $2\frac{1}{2}$

2. $\frac{24}{42}$

   $\frac{4}{7}$

3. $\frac{6}{3}$

   $2$

4. $\frac{44}{55}$

   $\frac{4}{5}$

5. $\frac{7}{21}$

   $\frac{1}{3}$

6. $\frac{12}{16}$

   $\frac{3}{4}$

7. $\frac{16}{18}$

   $\frac{8}{9}$

8. $\frac{60}{80}$

   $\frac{3}{4}$

9. $\frac{90}{30}$

   $3$

10. $\frac{36}{48}$

    $\frac{3}{4}$