Multiplying Fractions by Whole Numbers

Name: _____ Date: _____ Grade: Grade 4

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: *4 x 1/3 equals 4/12 because we multiply both numerator and denominator by 4.*

   Rewrite: _____

2. Fix the sentence: *Three times one fifth is one fifteenth, written as 1/15 in simplest form.*

   Rewrite: _____

3. Fix the sentence: *When we write 5 x 1/2, the answer cannot be a fraction greater than one whole.*

   Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

1. Using repeated addition, 4 x 1/3 = 1/3 + 1/3 + 1/3 + 1/3 = _____ .
2. The product 5 x 1/2 written as a fraction is _____ .
3. Six copies of the unit fraction 1/8 give the product _____ .
4. Three groups of 2/5 can be written as 3 x 2/5 = _____ .

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Show how 4 x 1/3 equals 4/3 using repeated addition. Write each step a Grade 4 student would write.

   _____

   _____

2. Explain in your own words why 6 x 1/8 is written as 6/8 and not as 1/48.

   _____

   _____

Answer Key · Multiplying Fractions by Whole Numbers · Grade: Grade 4

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: *4 x 1/3 equals 4/12 because we multiply both numerator and denominator by 4.*

   Rewrite: 4 x 1/3 equals 4/3 because we add 1/3 four times: 1/3 + 1/3 + 1/3 + 1/3 = 4/3.

2. Fix the sentence: *Three times one fifth is one fifteenth, written as 1/15 in simplest form.*

   Rewrite: Three times one fifth is three fifths, written as 3/5 in simplest form.

3. Fix the sentence: *When we write 5 x 1/2, the answer cannot be a fraction greater than one whole.*

   Rewrite: When we write 5 x 1/2, the answer is 5/2, which is a fraction greater than one whole.

Part B: Fill in the Blank

Write the missing word or number on each line.

1. Using repeated addition, 4 x 1/3 = 1/3 + 1/3 + 1/3 + 1/3 = **4/3** .
2. The product 5 x 1/2 written as a fraction is **5/2** .
3. Six copies of the unit fraction 1/8 give the product **6/8** .
4. Three groups of 2/5 can be written as 3 x 2/5 = **6/5** .

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Show how 4 x 1/3 equals 4/3 using repeated addition. Write each step a Grade 4 student would write.

   Start with 1/3 + 1/3 + 1/3 + 1/3. Each piece is 1/3, and there are four pieces, so the total is 4/3. The denominator 3 stays the same because the size of the parts does not change. The numerator becomes 4 because we have four parts. Therefore 4 x 1/3 = 4/3.

2. Explain in your own words why 6 x 1/8 is written as 6/8 and not as 1/48.

   When we multiply 6 x 1/8, we are adding 1/8 six times. The denominator 8 names the size of each piece, and that size does not change. Only the count of pieces changes, so the numerator becomes 6. The product is 6/8. Multiplying both numbers by 6 would give 6/48, which is wrong because it shrinks