Name _____ Date _____

Multiplying Fractions: Parts of a Whole Number, Parts of a Fraction and Area

Directions: Read each question to see what kind of answer it wants: a whole number, a fraction or a mixed number. When you type a fraction, use a slash, as in 5/9. In a mixed number, put a space after the whole number, as in 3 1/4.

1. What is $3/4 \times 20$?

_____

2. Which steps find $2/3 \times 9$?

A. Split 2/3 into 9 equal parts, then take 1 of the parts.

B. Split 9 into 3 equal parts, then take 2 of the parts.

C. Split 9 into 2 equal parts, then take 3 of the parts.

3. Two students multiply $2/5 \times 10$.

• Dana multiplies the numerator and the denominator by 10. She writes 20/50.
• Eli multiplies only the numerator by 10. He writes 20/5, which is 4.

Which student multiplied correctly, and why?

A. Neither, because only the denominator is multiplied, which gives 2/50.

B. Both, because 20/50 and 4 are equal.

C. Dana, because whatever is done to the numerator must be done to the denominator.

D. Eli, because 10 copies of 2/5 make 20 fifths, and 20 fifths is 4.

4. Multiply. The product is more than 1, so type it as a mixed number in simplest form, like 2 1/3.

$3/4 \times 6 =$ _____

5. Which expressions are equal to $3/8 \times 16$? Select the two that match.

☐ A. $(3 + 16) \div 8$ ☐ B. $(3 \times 8) \div 16$ ☐ C. $(3 \times 16) \div 8$

☐ D. $(16 \div 3) \times 8$ ☐ E. $(16 \div 8) \times 3$

6. Multiply the two fractions. Type the product as a fraction in simplest form, like 3/7.

$2/3 \times 2/5 =$ _____

7. Half of a pan of cornbread is left. Nico eats 1/3 of the cornbread that is left. What fraction of the whole pan does Nico eat?

A. 1/3 B. 5/6 C. 1/6 D. 2/5

8. A rectangular tile is 3/4 foot long and 1/2 foot wide. What is its area? Type a fraction in simplest form, with a slash, as in 2/9.

The area of the tile is _____ square foot.

9. A square garden plot is 1 yard long and 1 yard wide. Lines split it into 4 equal columns and 3 equal rows, which makes 12 equal small rectangles. Mint grows in a block that is 3 columns wide and 2 rows tall. What is the area of the mint block?

A. 17/12 square yards B. 1/2 square yard

C. 6 square yards D. 1/12 square yard

10. A trail is 5/6 mile long. Ben has walked 3/4 of the trail. How far has he walked? Give the distance as a fraction in simplest form, like 5/11.

Ben has walked _____ mile.