Name _____ Date _____

Multiplying and Dividing Decimals: Where Does the Decimal Point Go?

Directions: Think about what each digit is worth as you work. An estimate with easier numbers can show where the decimal point belongs. Type each number answer with digits, and with a decimal point if it has one.

1. Multiply.

0.4×6

_____

2. Two students multiply 0.2×0.4.

• Felix multiplies $2 \times 4 = 8$ and writes 0.8, with one decimal place like each factor.
• Selma says 2 tenths of 4 tenths is 8 hundredths, so she writes 0.08.

Whose product is correct, and how do you know?

A. Felix's, because a product has the same number of decimal places as each factor.

B. Both, because 0.8 and 0.08 are equal.

C. Selma's, because tenths times tenths make hundredths.

3. What is 0.7×0.5?

_____

4. The digits in the product 2.4×1.5 are 3, 6 and 0, in that order. Use an estimate to decide where the decimal point goes. Which number is 2.4×1.5?

A. 0.36 B. 36 C. 360 D. 3.6

5. You know that $36 \times 4 = 144$. Use that fact to find 3.6×0.4.

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6. Divide.

$7.2 \div 8$

_____

7. How many groups of 0.6 are in 4.8?

$4.8 \div 0.6$

_____

8. Divide 6 by 0.25. What is the quotient?

A. 1.5 B. 24 C. 0.24 D. 2.4

9. Which expressions are equal to 1.2? Select the two that equal 1.2.

☐ A. $12 \div 0.1$ ☐ B. 0.3×4 ☐ C. 0.3×0.4

☐ D. $0.6 \div 2$ ☐ E. $2.4 \div 2$

10. Two friends buy 3 pizzas that cost $7.50 each. They split the total cost equally. How much does each friend pay?

_____ dollars