Multiplying Decimals

Decimals

Name: _____ Date: _____ Grade 6

1. Select all the expressions that are equivalent to (0.6) · (0.7).

- ☐ **A.** 6 · (0.1) · 7 · (0.1)
- ☐ **B.** 6 · (0.01) · 7 · (0.1)
- ☐ **C.** $6 \cdot 7 \cdot \frac{1}{10} \cdot \frac{1}{10}$
- ☐ **D.** $6 \cdot 7 \cdot \frac{1}{10}$
- ☐ **E.** $\frac{6}{10} \cdot \frac{7}{10}$
- ☐ **F.** 6 · (0.01) · 7 · (0.01)

2. Determine each product.

a 24 · (0.1) _____

b $57 \cdot \frac{1}{10}$ _____

c 4.6 · (0.1) _____

d $2.35 \cdot \frac{1}{10}$ _____

3. Determine each product.

a $236 \cdot \frac{1}{100}$ _____

b 7.4 · (0.01) _____

c $3.08 \cdot \frac{1}{100}$ _____

d 6.152 · (0.01) _____

4. Which expressions have the same value as (0.214) · (0.6)? Select all that apply.

- ☐ **A.** 0.1284
- ☐ **B.** 214 · 6 · (0.0001)
- ☐ **C.** $214 \cdot \frac{1}{1000} \cdot 6 \cdot \frac{1}{10}$
- ☐ **D.** $214 \cdot \frac{1}{100} \cdot 6 \cdot \frac{1}{10}$
- ☐ **E.** 0.01284

5. Calculate the value of each expression. Show your thinking.

a $(4.3) \cdot 6$

b $(0.7) \cdot (5.2)$

c $(0.1) \cdot (0.48)$

d $(0.36) \cdot (0.27)$

6. Calculate the value of each expression. Show your thinking.

a $(2.4) \cdot (0.003)$

b $(0.005) \cdot (0.046)$

7. Ava found $(0.12) \cdot (0.07)$ by writing the decimals as fractions. Her work is shown. Is Ava correct? Explain your thinking.

Ava's work

$$\frac{12}{100} \cdot \frac{7}{10} = \frac{84}{1000} = 0.084$$