Multiplying Decimals

Decimals • Answer Key

ANSWER KEY • Amplify Alignment: Grade 6 Accelerated, Unit 3, Lesson 15

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) — **2.4**

b $57 \cdot \frac{1}{10}$ — **5.7**

c 4.6 · (0.1) — **0.46**

d $2.35 \cdot \frac{1}{10}$ — **0.235**

3. Determine each product.

a $236 \cdot \frac{1}{100}$ — **2.36**

b 7.4 · (0.01) — **0.074**

c $3.08 \cdot \frac{1}{100}$ — **0.0308**

d 6.152 · (0.01) — **0.06152**

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 $(4.3) \cdot 6$

25.8

b $(0.7) \cdot (5.2)$

3.64

c $(0.1) \cdot (0.48)$

0.048

d $(0.36) \cdot (0.27)$

0.0972

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

a $(2.4) \cdot (0.003)$

0.0072

b $(0.005) \cdot (0.046)$

0.00023

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

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

No. 0.07 is 7 hundredths, so it should be $\frac{7}{100} \cdot \frac{12}{100} \cdot \frac{7}{100} = \frac{84}{10000} = 0.0084$.