

Lesson 1.5 **Extra Practice**

Write the product using exponents.

- $\frac{3}{8} \cdot \frac{3}{8} \cdot \frac{3}{8} \cdot \frac{3}{8} \cdot \frac{3}{8} \cdot \frac{3}{8}$ $(\frac{3}{8})^6$
- $0.4 \cdot 0.4 \cdot 0.4 \cdot 0.4 \cdot 0.4$ 0.4^5
- $(-2.5) \cdot (-2.5) \cdot (-2.5) \cdot (-2.5)$ $(-2.5)^4$
- $-(1.4 \cdot 1.4 \cdot 1.4)$ $-(1.4)^3$
- $-(\frac{2}{7} \cdot \frac{2}{7} \cdot \frac{2}{7} \cdot \frac{2}{7} \cdot \frac{2}{7} \cdot \frac{2}{7} \cdot \frac{2}{7})$ $-(\frac{2}{7})^7$
- $(-\frac{1}{5}) \cdot (-\frac{1}{5}) \cdot (-\frac{1}{5}) \cdot (-\frac{1}{5})$ $(-\frac{1}{5})^4$

Evaluate the expression.

- -1.8^2 -3.24
- $(\frac{4}{9})^3$ $\frac{4^3}{9^3} = \frac{64}{729}$
- $(-\frac{6}{7})^4$ $\frac{1296}{2401}$
- 3.5^3 42.875
- 0.8^2 0.64
- $-(\frac{2}{5})^5$ $-\frac{2^5}{5^5} = -\frac{32}{3125}$

13. Your friend evaluates the expression. Is your friend correct? Explain your reasoning.

no $3^3 = 27$ then did $3 \cdot 3 = 9$ and $5 \cdot 3 = 15$

$$\left(\frac{3}{5}\right)^3 = \frac{3^3}{5^3} = \frac{9}{15}$$

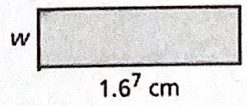
Simplify each expression. Write your answer as a power.

- $(\frac{1}{8})^3 \cdot (\frac{1}{8})^7 = (\frac{1}{8})^{10}$
- $(1.9)^6^2 = 1.9^{12}$
- $\frac{(-1.46)^7}{(-1.46)^3} = (-1.46)^4$
- $(\frac{3}{8})^0 \cdot (\frac{4}{5})^6 = (\frac{4}{5})^6$
- $(-\frac{2}{7})^2 \cdot (-\frac{2}{7})^8 = (-\frac{2}{7})^{10}$
- $\frac{3.4^5}{3.4^2} = 3.4^3$
- $(0.26^3)^9 = 0.26^{27}$
- $(\frac{2}{9})^9 \cdot (\frac{3}{4})^0 = (\frac{2}{9})^9$

22. The area of the rectangle is 1.6^9 square centimeters. Find the width of the rectangle.

$A = b \cdot h$

$1.6^9 = w \cdot 1.6^7$



$\frac{1.6^9}{1.6^7} = 1.6^2$