An expression using a base and an exponent is a ______.

An <u>exponent</u> tells the power of a number, or how many times that number is ______ times itself.

Label the different parts of the power shown below.

2^{4}

Identify the base and exponent in each expression.

a) 1.26

b) (-4)5

Do you think there is a difference between these two expressions?

$$-4^{2}$$
 and $(-4)^{2}$

Tell whether each statement is correct. If it is incorrect, state the reason.

a)
$$2 \cdot 2 \cdot 2 = 6^2$$

Expand and evaluate each expression.

Write in exponential notation.

a) 2.53

a) $5 \cdot 5 \cdot 5 \cdot 5$

b)
$$(-3) \cdot (-3) \cdot (-3) \cdot (-3)$$
 b) $(\frac{2}{3})^5$

c)
$$\left(\frac{1}{2}x\right) \cdot \left(\frac{1}{2}x\right) \cdot \left(\frac{1}{2}x\right)$$

c) $(-5)^2$