

**Sec. 1.4 Laws of Exponents (Part A Core)**

1. Write each product as a single power.

**a)**  $4^3 \times 4^2$

**b)**  $5^0 \times 5^0$

**c)**  $(-2)^2 \times (-2)^4$

**d)**  $-6^3 \times 6^1$

**e)**  $(-7)^0 \times (-7)^2$

**f)**  $(-9)^6 \times (-9)^3$

2. Write each quotient as a single power.

**a)**  $8^7 \div 8^5$

**b)**  $10^4 \div 10^0$

**c)**  $(-1)^6 \div (-1)^3$

**d)**  $\frac{-3^4}{3^4}$

**e)**  $\frac{(-9)^{10}}{(-9)^5}$

**f)**  $2^3 \times 2^6 \div 2^9$

3. Express as a single power (if you can), then evaluate.

**a)**  $2^0 \times 2 + 2^3$

**b)**  $(-5)^8 \div (-5)^6 \times (-5)$

4. Identify, then correct any errors in these answers.

a)  $5^3 \times 5^2 = 5^6$

b)  $2^3 \times 4^2 = 8^5$

c)  $(-3)^8 \div (-3)^4 = (-3)^4$