Section 3.3 Extra Practice

1. Evaluate each expression. Show your work.

a) $5(3)^3 = 5 \times 3 \times 3 \times 3$

     = _____

b) $6(-5)^2$

c) $4(-2^4)$

d) $-7(4^3)$

2. Write each expression, using a coefficient and a power.
Then, find the value of each expression. Show your work.

a) $4 \times 3 \times 3 \times 3 = 4 \, (3)^{\square}$ ← coefficient and power

                   $= 4 \times$ _____   ← evaluate power

                   = _____   ← value

b) $5 \times (-2) \times (-2) \times (-2) \times (-2) \times (-2)$

c) $-1 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$

d) $6(-10)(-10)(-10)(-10)(-10)$

Name: _____   Date: _____

3. Evaluate using your calculator.

a) $-6(4)^6 =$ _____   `C` 6 `+⟳` `×` `(` 4 `)` `yˣ` 6 `=`

b) $7 \times 8^3 =$ _____

c) $-4(-9)^3 =$ _____

d) $-7^4 =$ _____

4. Evaluate. Show your work. ⟶ | Use the order of operations. |

a) $(6 + 3)^2 - 21$

$$= \boxed{}^{\,2} - 21$$

$$= \underline{} - 21$$

$$= \underline{}$$

b) $6^2 - 5^2$

c) $12 + (-4)^2 - (-3^3)$

d) $5^3 - 4(-2^3)$

Name: _____   Date: _____

5. Find the value of each expression. Show your work.

a) $[(9 - (-2)]^2 + (-3)^3$

b) $12 - 3(4^2)$

c) $36 + (4^3 - 6^2)$

d) $-(-3^2) + (-9)^2$

6. For each pair of expressions, circle the one with the greatest value. Show your work.

a) $3(2^4)$ $4(3^2)$

b) $10^3 + 10^3$ $(10 + 10)^3$

c) $(5 \times 3)^2$ $5^2 \times 3^2$

d) 4×3^2 $6(-2)^2$