Name: _____

1. The expression $\frac{24x^6y^3}{-6x^3y}$ is equivalent to
   1. $-4x^2y^3$
   2. $-4x^3y^3$
   3. $-4x^9y^4$
   4. $-4x^3y^2$

2. What is the product of $3a^2b$ and $-2ab^3$?
   1. a^2b^3
   2. a^3b^4
   3. $-6a^2b^3$
   4. $-6a^3b^4$

3. What is one-third of 3^6?
   1. 1^2 2. 3^2
   3. 3^5 4. 9^6

4. The expression is $\frac{(10w^3)^2}{5w}$ equivalent to
   1. $2w^5$ 2. $2w^8$
   3. $20\ w^5$ 4. $20\ w^8$

5. Which expression is equivalent to $3^3 \cdot 3^4$?
   1. 9^{12} 2. 9^7
   3. 3^{12} 4. 3^7

6. Which expression represents $\frac{27x^{18}y^5}{9x^6y}$ in simplest form?
   1. $3x^{12}y^4$
   2. $3x^3y^5$
   3. $18x^{12}y^4$
   4. $18x^3y^5$

7. What is the value of $3^0 + 3^{-2}$?
   1. 0
   2. $\frac{1}{9}$
   3. $1\frac{1}{9}$
   4. 6

8. What is the value of 2^{-3}?
   1. $\frac{1}{6}$
   2. $\frac{1}{8}$
   3. -6
   4. -8

9. If $x \neq 0$, then $\frac{(x^2)^3}{x^5} \cdot 1000$ is equivalent to
   1. $1000x$ 2. $1000 + x$
   3. 1000 4. 0

10. The expression $3^2 \cdot 3^3 \cdot 3^4$ is equivalent to
    1. 27^9 2. 27^{24}
    3. 3^9 4. 3^{24}

Answer Key for CM Exp 1

Question 1: 4
Question 2: 4
Question 3: 3
Question 4: 3
Question 5: 4
Question 6: 1
Question 7: 3
Question 8: 2
Question 9: 1
Question 10: 3