**Chapter 6 Mid-Chapter Study Guide - Expressions**

**Write each product using an exponent.**

 **1.** 7 × 7 × 7

 **2.** 11 × 11 × 11 × 11 × 11

**Write each power as a product of the same factor. Then find the value.**

 **3.** $10^{3}$

 **4.** $2^{5}$

**Use** $6^{5}$ **for questions 5 and 6.**

 **5**. What number is the exponent?

 **6**. What number is the base?

**Find the value of each expression. Show all work.**

**7.** 13 + 27 – 14 **8.** (21 + 6) × 2 – 10 **9.** 24 – 10 ÷ 2

**10.** 17 + 2 × (7 + 9) **11**. $456^{0}$ + ( $\frac{3}{4})^{3}$ **12**. 37 + 8 - 21 - 36

**Evaluate each expression if *m* = 2 and *n* = 9. Show all work.**

**13.** 2*m* – 10 **14.** *n*2 – 3*m* **15.** 4*mn*

**16**. Mrs. Russell ordered 32 cupcakes for her class. The bakery charges $16.75 for a delivery fee. What was her total if the cupcakes were $3.50 each?

**Write each phrase as an algebraic expression.**

**17.** seven times a number **18.** 46 divided by a number

**19**. Mr. Edwards bought a movie ticket for $9.75 and 3 medium drinks. Define a variable and write an expression to represent the total amount of money he spent.

**1.\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**3. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Value:\_\_\_\_\_\_\_\_\_**

**4. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Value:\_\_\_\_\_\_\_\_\_**

**5. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**6. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**7. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**8. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**9. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**10. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**11. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**12. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**13. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**14. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**15. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**16. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**17. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**18. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**19. \_\_\_\_\_\_\_\_\_\_\_\_\_**