

Student: _____
Date: _____

Instructor: Deb Wertz
Course: MAP102 MASTER

Assignment: Homework #7

1. State the base of the exponent 8 in the expression.

$$(-6)^8$$

The base of the exponent 8 is _____.

2. State the base of the exponent 4 in the expression.

$$-8^4$$

The base of the exponent 4 is _____.

3. State the base of the exponent 7 in the expression.

$$cx^7$$

The base of the exponent 7 is _____.

4. Select the answer that best completes the given statement.

A(n) (1) _____ is a shorthand notation for repeated multiplication of the same number.

- (1) absolute value
 square root
 base
 exponent

5. Select the correct choices that complete the sentence below.

In $(-5)^2$, the 2 is the (1) _____ and the -5 is the (2) _____.

- (1) exponent (2) exponent.
 base base.

6. Evaluate.

$$-9^2$$

$$-9^2 = \underline{\hspace{2cm}}$$

7. Evaluate.

$$(-2)^2$$

$$(-2)^2 = \underline{\hspace{2cm}}$$

8. Find the value of the expression.

$$\left(-\frac{1}{10}\right)^3$$

$$\left(-\frac{1}{10}\right)^3 = \underline{\hspace{2cm}}$$

(Simplify your answer.)

9. Write the expression with positive exponents.

$$4a^{-1}u^{-3}$$

$$4a^{-1}u^{-3} = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

10. Write the expression with positive exponents.

$$a^3b^{-1}c^{-9}$$

$$a^3b^{-1}c^{-9} = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

11. Simplify. Use positive exponents for any variables. Assume that all bases are not equal to 0.

$$\frac{p^{-5}}{q^{-7}}$$

$$\frac{p^{-5}}{q^{-7}} = \underline{\hspace{2cm}} \text{ (Simplify your answer.)}$$

12. Evaluate the following. Assume that all bases are not equal to 0.

$$(-2x+8)^0$$

$$(-2x+8)^0 = \underline{\hspace{2cm}}$$

13. Evaluate the expression. Assume that all bases are not equal to 0.

$$-5x^0$$

$$-5x^0 = \underline{\hspace{2cm}}$$

(Simplify your answer.)

14. Evaluate the expression. Assume that all bases are not equal to 0.

$$3x^0 + 5$$

$$3x^0 + 5 = \underline{\hspace{2cm}}$$

(Simplify your answer.)

15. Simplify. Use positive exponents for any variables.

$$9^{-2}$$

$$9^{-2} = \underline{\hspace{2cm}} \quad (\text{Type an integer or a simplified fraction.})$$

16. Simplify. Use positive exponents for any variables.

$$(-3)^{-3}$$

$$(-3)^{-3} = \underline{\hspace{2cm}}$$

(Type an integer or a fraction.)

17. Simplify. Use positive exponents for any variables. Assume that all bases are not equal to 0.

$$9x^{-2}$$

$$9x^{-2} = \underline{\hspace{2cm}} \quad (\text{Simplify your answer.})$$

18. Simplify. Use positive exponents for any variables. Assume that all bases are not equal to 0.

$$4^0 - 3x^0$$

$$4^0 - 3x^0 = \underline{\hspace{2cm}}$$

19. Simplify. Use positive exponents for any variables.

$$3^{-1} + 2^{-2}$$

$$3^{-1} + 2^{-2} = \underline{\hspace{2cm}}$$

(Type an integer or a simplified fraction.)

20. Simplify. Use positive exponents for any variables.

$$5^{-2} \cdot y$$

$$5^{-2} \cdot y = \underline{\hspace{2cm}}$$

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

1. -6

2. 8

3. x

4. (1) exponent

5. (1) exponent
(2) base.

6. -81

7. 4

8. $-\frac{1}{1000}$

9. $\frac{4}{au^3}$

10. $\frac{a^3}{bc^9}$

11. $\frac{q^7}{p^5}$

12. 1

13. -5

14. 8

15. $\frac{1}{81}$

16. $-\frac{1}{27}$

17. $\frac{9}{x^2}$

18. -2

19. $\frac{7}{12}$

20. $\frac{y}{25}$
