

## Day 3~ Exponents HW

Student \_\_\_\_\_

1. Which is equivalent to  $5^{-1}$ ?

A.  $\frac{1}{25}$

B.  $\frac{1}{5}$

C.  $-5$

D. 4

2. Which expression is equivalent to  $20^8 \div 20^2$ ?

A.  $4 \cdot 20$

B.  $6 \cdot 20$

C.  $20^4$

D.  $20^6$

3. Which of the following represents  $\frac{1}{16} \times \frac{1}{8}$  using exponential notation?

A.  $(2^4)(2^3)$

B.  $(2^4)(2^{-3})$

C.  $(2^{-4})(2^3)$

D.  $(2^{-4})(2^{-3})$

4. What is the value of the expression  $8^{-2} \times 8^3$ ?

A. 64

B. 8

C.  $\frac{1}{8}$

D.  $\frac{1}{48}$

5. If  $(-3)^5 \times (-3)^2 = (-3)^x$ , what is the value of  $x$ ?

A. 3

B. 7

C. 10

D. 25

6. Which of the following is equivalent to  $\frac{5}{49}$ ?

A.  $5(7^2)$

B.  $\frac{1}{5(7^2)}$

C.  $5 - 7^2$

D.  $5(7^{-2})$

7. Which of the following is equivalent to  $10 \times 10^4 \times 10^3 \times 10^{-5}$ ?

A.  $10^2$

B.  $10^3$

C.  $10^7$

D.  $10^{13}$

8. Which expression is equivalent

to  $\frac{(3^2 \times 3^{-4})}{3^2}$ ?

A.  $-81$

B.  $-12$

C.  $\frac{1}{12}$

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

9. Which expression is equivalent to

$$5^2 \times 5^6 \div 5^{-3} ?$$

- A.  $5^4$
- B.  $5^5$
- C.  $5^9$
- D.  $5^{11}$

10. What is the value of the

expression  $\frac{2^{-6}}{2^4} \times 2^8 ?$

- A.  $\frac{1}{16}$
- B.  $\frac{1}{4}$
- C. 4
- D. 16