

POSITIVE EXPONENTS

A. Express each in exponential form.

1. $3 \times 3 \times 3 \times 3$

2. $2 \times 2 \times 2 \times 2 \times 2$

3. $5 \times 5 \times 5 \times 5 \times 5 \times 5$

4. $10 \times 10 \times 10 \times 10 \times 10$

5. $8 \times 8 \times 8$

6. $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4}$

7. $-6 \times -6 \times -6 \times -6$

8. $3 \times 3 \times 3 \times 3 \times 3 \times 3$

9. $-(7 \times 7 \times 7 \times 7)$

10. $\frac{7}{8} \times \frac{7}{8} \times \frac{7}{8} \times \frac{7}{8} \times \frac{7}{8}$

11. $4 \times 4 \times 4 \times 3 \times 3 \times 3 \times 4$

12. $15 \times 16 \times 17 \times 18 \times 19$

EXPONENTS

177

D. Complete the following chart.

Exponential Form	Factored Form	Standard Form
1. 5^2		
2.	$9 \times 9 \times 9$	
3.		81
4.	$3 \times 3 \times 3 \times 3$	
5. $(\frac{2}{3})^3$		
6. $(-7)^2$		
7. -7^2		
8.		16
9.	$(0.4)(0.4)(0.4)$	
10. 8^0		
11. $(-\frac{2}{3})^3$		
12.		$\frac{16}{25}$
13.	$(1.5)(1.5)(1.5)(1.5)$	
14. $(1)^2$		
15. $(-6)^4$		

E. Calculate the value of each (standard name) using the rules for order of operations (BEDMAS).

1. $3^3 - 2^4$

2. $4^3 + 3^2$

3. $8^2 - 5^2$

4. $5^3 - 3^5$

5. $10^3 \div (9 - 4)^2$

6. $6^2 - (2^0 + 3^1)$

7. $2^4 \times 2^4$

8. $10^4 \times 10^3$

9. $3^4 \div 3^3$

10. $10^3 \div 10^3$

11. $8^2 \div 4^3$

12. $4^5 - 5^4$

13. $2^4 + 5^0 - 1^3$

14. $6^2 - (3^3 + 7^0)$

15. $4^2 + 2^4 + 3^3$

16. $3^4 \times 3^3$

17. $3^5 \times 3^3 \div 3^4$

18. $2^8 \times 2^3 \div 2^{11}$

Name : _____

Score : _____

Teacher : _____

Date : _____

Evaluate the Exponents

1) $(7)^3 =$ _____

11) $(4)^2 =$ _____

2) $(-8)^3 =$ _____

12) $(9)^2 =$ _____

3) $(-5)^3 =$ _____

13) $(-9)^2 =$ _____

4) $(5)^3 =$ _____

14) $(-2)^3 =$ _____

5) $(8)^3 =$ _____

15) $(-3)^2 =$ _____

6) $(-6)^2 =$ _____

16) $(12)^3 =$ _____

7) $(6)^3 =$ _____

17) $(-3)^2 =$ _____

8) $(3)^3 =$ _____

18) $(-2)^2 =$ _____

9) $(2)^3 =$ _____

19) $(2)^2 =$ _____

10) $(10)^2 =$ _____

20) $(-4)^2 =$ _____

