

Name _____

Evaluate the exponential form.

1) -14^0

2) $(-12)^0$

8) $\left(\frac{3x^2}{z^2}\right)^3$

Simplify. Assume that variables represent nonzero numbers.

3) $(x^5y^3)(x^8y^7z^0)$

4) $(2y)^6(2y)^5$

5) $(t - 3)^{11}(t - 3)^7$

6) $(n^6)^3(m^5n)^4$

7) $\left(\frac{x+y}{4}\right)^3$

9) $\left(\frac{xy^7}{z^7}\right)^0$

Add as indicated.

10) $(7s + 14t) + (4t - 3s)$

Subtract.

11) $(20x^4 + 11x^2) - (-13x^4 + 4x^2)$

12) $(9x^7 + 16x^6 + 10) - (-7x^6 + 2x^7 + 19)$

Multiply.

13) $-5x^9y^6 \cdot 10x^6y$

14) $-4x^3z^2)(x^6yz^8)$

Multiply.

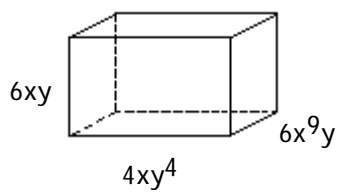
15) $(x + 4)(x - 4)$

16) $(4x - 10)(x + 1)$

17) $(x + 5)(x^2 - x + 7)$

Find the area or volume of the figure, as specified.

18) Find the volume.



Answer Key

Testname: WKS_12.1_12.3_REV

1) -1

2) 1

3) $x^{13}y^{10}$

4) $(2y)^{11}$

5) $(t - 3)^{18}$

6) $m^{20}n^{22}$

7) $\frac{(x + y)^3}{64}$

8) $\frac{27x^6}{z^6}$

9) 1

10) $4s + 18t$

11) $33x^4 + 7x^2$

12) $7x^7 + 23x^6 - 9$

13) $-50x^{15}y^7$

14) $-4x^9yz^{10}$

15) $x^2 - 16$

16) $4x^2 - 6x - 10$

17) $x^3 + 4x^2 + 2x + 35$

18) $144x^{11}y^6$