

1.(1 pt) Evaluate the expression -4^4 .

[NOTE: Your answer cannot be an algebraic expression.]

2.(1 pt) Evaluate the expression $4^3 + 4^5$.

[NOTE: Your answer cannot be an algebraic expression.]

3.(1 pt) Evaluate the expression $3^{-3}5^2$.

[NOTE: Your answer cannot be an algebraic expression.]

4.(1 pt) Evaluate the expression $(\frac{3}{-2})^5$.

[NOTE: Your answer cannot be an algebraic expression.]

5.(1 pt) Evaluate the expression $\frac{5^3}{5^2}$.

[NOTE: Your answer cannot be an algebraic expression.]

6.(1 pt) Evaluate the expression $\frac{2^3}{4^{-4}}$.

[NOTE: Your answer cannot be an algebraic expression.]

7.(1 pt) Evaluate the expression $\sqrt[3]{-243}$.

[NOTE: Your answer cannot be an algebraic expression.]

8.(1 pt) Evaluate the expression $\sqrt{25 + 144}$.

[NOTE: Your answer cannot be an algebraic expression.]

9.(1 pt) Evaluate the expression $\sqrt{\frac{10.8}{5}}$.

[NOTE: Your answer cannot be an algebraic expression.]

10.(1 pt) Evaluate the expression $64^{-4/3}$.

[NOTE: Your answer cannot be an algebraic expression.]

11.(1 pt) The expression $\frac{2^4 2^4 2^{-4}}{\sqrt{4^5 2^5 2^{-3}}}$ equals 2^n where n is:

12.(1 pt) The expression $(3a^5 b^2 c^4)^2 (2a^5 b^5 c^4)^3$ equals $na^r b^s c^t$

where n , the leading coefficient, is: _____

and r , the exponent of a , is: _____

and s , the exponent of b , is: _____

and finally t , the exponent of c , is: _____

[NOTE: Your answers cannot be algebraic expressions.]

13.(1 pt) The expression $(\frac{x^5 y^4 z^3 x^{-2}}{x^4 y^3 z^2 y^4})^{-4}$ equals $x^r y^s z^t$

where r , the exponent of x , is: _____

and s , the exponent of y , is: _____

and finally t , the exponent of z , is: _____

[NOTE: Your answers cannot be algebraic expressions.]

14.(1 pt) The expression $\sqrt{x^4 y^4} \sqrt[3]{x^2 y^4} \sqrt[5]{x^2}$ equals $x^r y^s$

where r , the exponent of x , is: _____

and s , the exponent of y , is: _____

15.(1 pt) The expression $\sqrt{x^4 y^2} \sqrt[3]{x^5 y^3} \sqrt[5]{x^5}$ equals $x^r y^s$

where r , the exponent of x , is: _____

and s , the exponent of y , is: _____

16.(1 pt) The expression $\sqrt[3]{64x^3}$ equals nx^r

where n , the leading coefficient, is: _____

and r , the exponent of x , is: _____

17.(1 pt) If you rationalize the denominator of

$$\frac{1}{5\sqrt{5} - 4\sqrt{3}}$$

then you will get

$$\frac{r\sqrt{5} + s\sqrt{3}}{n}$$

where r , s , and n are all positive integers (with no common factors).

$r =$ _____

$s =$ _____

$n =$ _____

[NOTE: Your answers cannot be algebraic expressions.]

18.(1 pt) Find x if

$$\frac{(2.9)^x (2.9)^{-2}}{(2.9)^{-2}} = (2.9)^8$$

$x =$ _____