Quiz Review

Monday, September 23, 2019 7:46 AM

Simplify the following expressions using only positive exponents.

$z^5 \cdot z^8$

z^{13}

$\frac{t^3}{t^9}$

$\frac{1}{t^6}$

$(-5t^3x^2y^8)^0$

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Simplify the following expressions using only positive exponents.

$\frac{2x^4y^{-4}z^{-3}}{3x^2y^{-3}z^4}$

$\frac{2x^2}{3yz^7}$

$\frac{2x^2y^4 \cdot 4x^2y^4 \cdot 3x}{3x^{-3}y^2}$

$8x^8y^6$

Write each radical using rational exponents.

$\sqrt{\quad}$ $\sqrt[4]{2}$ $\sqrt[3]{2.45}$

$\sqrt{7}$ $7^{1/2}$

$\sqrt[4]{2}$ $2^{1/4}$

$\sqrt[3]{24^5}$ $24^{5/3}$

Solve for x in the following equations.

$5^{9x-4} = 5^{3x+2}$

$9x-4=3x+2$

$6x=6$

$x=1$

$4^{5x+6} = 64$

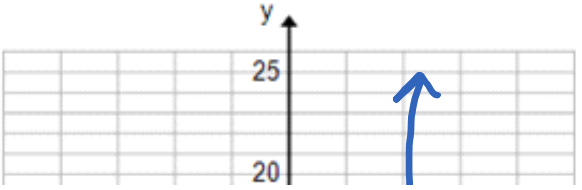
$4^{5x+6} = 4^3$

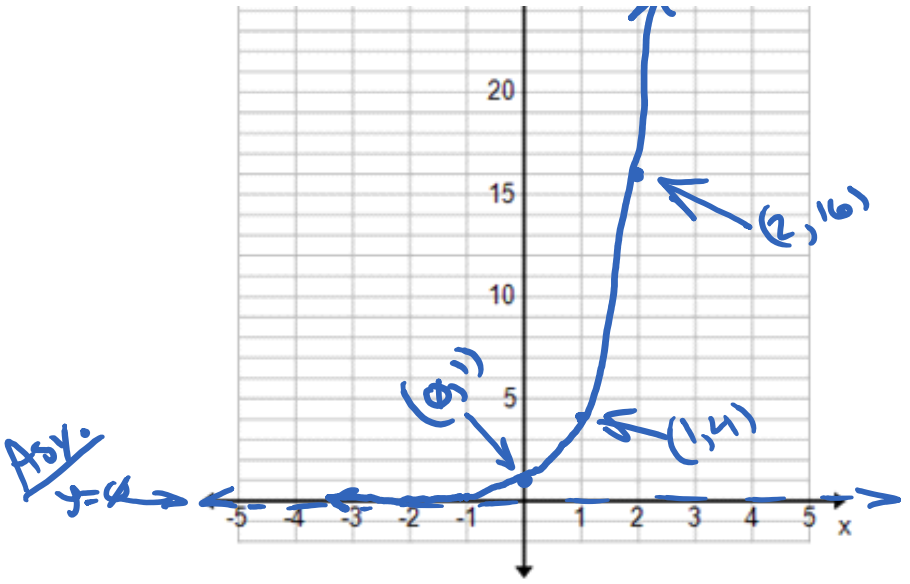
$5x+6=3$

$5x=-3$

$x=\frac{-3}{5}$

Graph the function $f(x)4^x$ in the graph below. Label the asymptote and at least 3 points.





Which of the following is not exponential.

x	0	1	2	3	4
y	3	7.5	18.75	46.875	117.1875

x	0	1	2	3	4
y	32	16	8	4	2

x	0	1	2	3	4
y	2	3	4	5	6

x	0	1	2	3	4
y	4	6	9	13.5	20.25
