Simplify the following expressions using only positive exponents.

$z^5 \cdot z^8$ $\dfrac{t^3}{t^9}$ $\left(-5t^3x^2y^8\right)^0$

Simplify the following expressions using only positive exponents.

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

Write each radical using rational exponents.

$\sqrt{5}$ $\sqrt[4]{2}$ $\sqrt[3]{245}$

$$\sqrt{7} \qquad\qquad \sqrt[4]{2} \qquad\qquad \sqrt[3]{24^5}$$

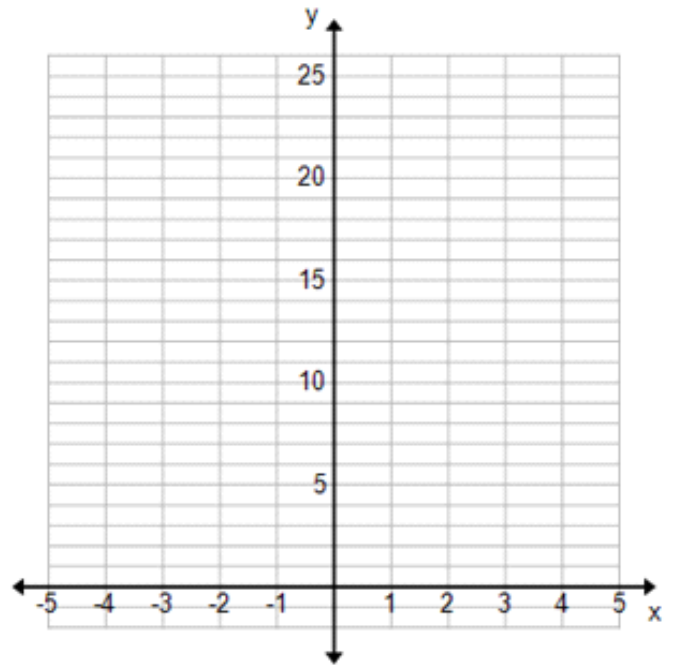Solve for x in the following equations.

$$5^{9x-4} = 5^{3x+2} \qquad\qquad\qquad 4^{5x+6} = 64$$

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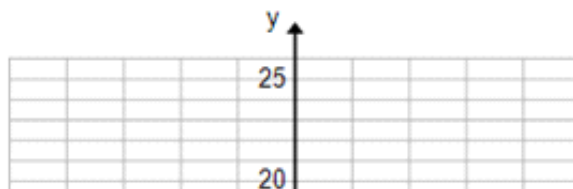
and at least 3 points.

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