

$$3^{-2x+1} = 1944 \cdot 2^{2x+1}$$

$$3^{-2x+1} = 2^3 \cdot 3^5 \cdot 2^{2x+1}$$

$$3^{-2x+1} \cdot 3^{-5} = 2^3 \cdot 2^{2x+1}$$

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

$$\frac{2^{2x+4}}{3^{-2x-4}} = 1$$

$$\frac{2^{2x+4}}{3^{-(2x+4)}} = 1$$

$$2^{2x+4} \cdot 3^{2x+4} = 1$$

$$(2 \cdot 3)^{2x+4} = 1$$

$$6^{2x+4} = 6^0$$

$$2x + 4 = 0$$

$$2x = -4$$

$$x = -2$$