Name _____   Date _____

Year Group _____

Solve the equations

   1. $3^{3x} = 3^{5x-4}$

1st Step => _____ = _____

 Answer: $x = $ _____

   2. $2^{8x} = 2^{4x+16}$

1st Step => _____ = _____

 Answer: $x = $ _____

   3. $5^{-8x-4} = 5^{-2x-10}$

1st Step => _____ = _____

 Answer: $x = $ _____

   4. $6^{x^2-8} = 6^{2x}$

 Answer: $x = $ _____   or $x = $ _____

   5. $\left(\frac{1}{7}\right) * (7)^{3x} = 49 * (7^x)^4$

 Answer: $x = $ _____

   6. $4 * (2)^{-3x-5} = 32 * (2^x)^{-1}$

 Answer: $x = $ _____