

Name _____

Missing Base or Exponent

Find the value of x in the following expressions.

Using the law power of a powers.

1) $(4^x)^2 = 4^6$ $x = 3$	2) $(7^4)^x = 7^{28}$ $x = 7$
3) $(6^x)^9 = 6^{36}$ $x = 4$	4) $(9^x)^2 = 9^6$ $x = 3$
5) $(3^7)^x = 3^{35}$ $x = 5$	6) $(2^x)^3 = 2^{21}$ $x = 7$
7) $(8^4)^x = 8^8$ $x = 2$	8) $(7^x)^5 = 7^{15}$ $x = 3$