

Name _____

Power of Products

Find the value of x in each expression.

1) $7^2 \cdot x^2 = 63^2$ $x = 9$	2) $(-3)^5 \cdot x^5 = 15^5$ $x = -5$
3) $x^8 \cdot 7^8 = 42^8$ $x = 6$	4) $7^x \cdot 4^x = 28^7$ $x = 7$
5) $-3^5 \cdot 4^5 = -12^x$ $x = 5$	6) $x^{12} \cdot 6^{12} = -24^{12}$ $x = -4$
7) $(-5)^7 \cdot (-6)^7 = x^7$ $x = 30$	8) $3^x \cdot 9^8 = 27^x$ $x = 8$