

Name: _____

Date: _____

Powers of Products and Quotients**Simplify.**

1) $(12 x^2 y^5)^2$

2) $(5 x^4)^2$

3) $\left(\frac{x^8}{x^6 y^2}\right)^2 =$

4) $(4 x^4 y^6)^5$

5) $(11 x^5)^2$

6) $(2 \times 2^4)^2 =$

7) $(4^2)^2 =$

8) $(3^3 \times 3^2)^3 =$

9) $(3 x^2 y^2)^2$

10) $(2 x^4 y^4)^3$



1) $(12 x^2 y^5)^2$

$144 x^4 y^{10}$

2) $(5 x^4)^2$

$25 x^8$

3) $\left(\frac{x^8}{x^6 y^2}\right)^2 =$

$\frac{x^4}{y^4}$

4) $(4 x^4 y^6)^5$

$1024 x^{20} y^{30}$

5) $(11 x^5)^2$

$121 x^{10}$

6) $(2 \times 2^4)^2 =$

2^{10}

7) $(4^2)^2 =$

4^4

8) $(3^3 \times 3^2)^3 =$

3^{15}

9) $(3 x^2 y^2)^2$

$9 x^4 y^4$

10) $(2 x^4 y^4)^3$

$8 x^{12} y^{12}$