Algebra 1 Name_____ ID: 1

Assignment

Date_____ Period____

Simplify. Your answer should contain only positive exponents.

1) $3m^{-2} \cdot 3m^{-2}$

2) $2x^{-2} \cdot 2y^{4}$

3) $3y^{3} \cdot 3x^{0}y^{2}$

4) $4a^{-2}b^{3} \cdot 3a^{4}$

5) $\left(-2n \cdot -m^{2}n^{-4}\right)^{2}$

6) $\left(2m^{2}n^{2}\right)^{2} \cdot m^{0}$

7) $2x^{-1}y^{-3} \cdot \left(-x^{0}y^{5}\right)^{0}$

8) $\left(x^{3}y^{-1} \cdot -2x^{5}y^{-4}\right)^{2}$

9) $\dfrac{\left(2x^{-1}y^{-4}\right)^{2}}{x^{3}y^{-4} \cdot -2y^{2}}$

10) $\left(\dfrac{2vu^{2}}{u^{0}v^{4} \cdot 2u^{4}v^{0}}\right)^{-3}$

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Simplify. Your answer should contain only positive exponents.

1) $3m^{-2} \cdot 3m^{-2}$ $\frac{9}{m^4}$

2) $2x^{-2} \cdot 2y^4$ $\frac{4y^4}{x^2}$

3) $3y^3 \cdot 3x^0y^2$
$9y^5$

4) $4a^{-2}b^3 \cdot 3a^4$
$12b^3a^2$

5) $(-2n \cdot -m^2n^{-4})^2$ $\frac{4m^4}{n^6}$

6) $(2m^2n^2)^2 \cdot m^0$
$4m^4n^4$

7) $2x^{-1}y^{-3} \cdot (-x^0y^5)^0$ $\frac{2}{xy^3}$

8) $(x^3y^{-1} \cdot -2x^5y^{-4})^2$ $\frac{4x^{16}}{y^{10}}$

9) $\frac{(2x^{-1}y^{-4})^2}{x^3y^{-4} \cdot -2y^2}$ $-\frac{2}{x^5y^6}$

10) $\left(\frac{2vu^2}{u^0v^4 \cdot 2u^4v^0}\right)^{-3}$
v^9u^6