

Name: _____ Hr: _____

Math 8 - Unit 8 Exponent Rules Review M

Simplify the expressions.

HINTS:

$$x^{-2} = \frac{1}{x^2}$$

$$(2ab)^2 = 4a^2b^2$$

$$x^0 = 1$$

$$x^2 * x^3 = x^5$$

$$(x^2)^3 = x^6$$

$$\frac{x^5}{x^2} = x^3$$

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

1 -4^2

2 $(-5)^2$

3 $(x^6)^7$

4 $\frac{k^{11}}{k^8}$

5 $(-4)^{-2}$

6 $\frac{1}{a^{-8}}$

7 $(-4x)^2$

8 $(-2gh)^3$

9 $(n^{-3})^2$

10 $7x^0$

11 $(81xyz)^0$

12 $(p^2)^3$

13 $t^8(t^4)^{-1}$

14 $-4h^{-4} \cdot 3h^6$

15 $\left(\frac{f}{4}\right)^2$

16 $\frac{a^{-9}}{a^{11}}$

23 Simplify $\frac{9}{c^{-8}d^5}$

17 $(4xy^5)^2(xy)^4$

24 $(jk)^3 \cdot k^0$

18 Fill in the missing exponent.
 $(e^4)^{(\quad)} = e^{-20}$

25 $\frac{c^7d^{12}}{c^{18}d^4}$

19 Evaluate the expression for $x = 3$ and $y = -2$.
 $18x^{-2}y^0$

26 $\left(\frac{5x^2}{y^4}\right)^3$

20 $(v^3)^8$

27 $(3x^2y^3)^2 \cdot y$

21 $-5x^3 \cdot y^4 \cdot 2x^2$

28 Evaluate when $w = -2$ and $x = 3$
 w^2x

22 $\frac{3r^{-5}}{s^{-7}}$

29 Tell if the following expressions are simplified. If not, finish simplifying them.

<p>A) $2m^2 \cdot 6n^{12}$</p>	<p>B) $\frac{-5r^3s}{t^2}$</p>	<p>C) $d^2e^{-3}f$</p>
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