Name: ----------

Date: ---------- Score: ----------

MATH MONKS

Simplifying Exponents Worksheet

Simplify. Your answer should contain only positive exponents

1 $(x^2)^0$

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

3 $(8r^0)^4$

4 $3p^2 \cdot 4p$

5 $2p^3q^{-3} \cdot 2p^{-1}q^3$

6 $(a^2b^{-1})^2$

7 $\frac{x^{-1}}{4x^{-1}}$

8 $(2l^4m^{-3})^{-1}$

9 $(2fg^4)^4(fg)^6$

10 $\frac{2x^4y^{-4}}{8x^7y^3}$

11 $-(9y)^0$

12 $\frac{1}{p^{-8}}$

13 $(y^2)^0$

14 $4x^3 \cdot xy^2$

15 $(2x^2)^{-4}$

16 $(4x^4y^{-2})^{-1}$

17 $(4p)^{-2}$

18 $(2y^2 \cdot 4x)^{-1}$

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MATH MONKS

Simplifying Exponents Worksheet

Answers

1 $(x^2)^0$

1

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

$\frac{1}{256x^8}$

3 $(8r^0)^4$

4096

4 $3p^2 \cdot 4p$

$12p^3$

5 $2p^3q^{-3} \cdot 2p^{-1}q^3$

$5p^2$

6 $(a^2b^{-1})^2$

$\frac{a^4}{b^2}$

7 $\frac{x^{-1}}{4x^{-1}}$

$\frac{1}{4}$

8 $(2l^4m^{-3})^{-1}$

$\frac{m^3}{2l^4}$

9 $(2fg^4)^4(fg)^6$

$6f^{10}g^{22}$

10 $\frac{2x^4y^{-4}}{8x^7y^3}$

$\frac{1}{4x^3y^7}$

11 $-(9y)^0$

1

12 $\frac{1}{p^{-8}}$

p^8

13 $(y^2)^0$

1

14 $4x^3 \cdot xy^2$

$4x^4y^2$

15 $(2x^2)^{-4}$

$\frac{1}{16x^8}$

16 $(4x^4y^{-2})^{-1}$

$\frac{y^2}{4x^4}$

17 $(4p)^{-2}$

$\frac{1}{16p^2}$

18 $(2y^2 \cdot 4x)^{-1}$

$\frac{1}{8y^2x}$