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

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

MATH MONKS

Exponents Worksheet

Evaluate each expression

1. $\dfrac{(-3)^7}{(-3)^2 \times (-3)^3}$

2. $(-1)^3 \times (-1)^2 \times (-1)$

3. $\left(\dfrac{r^2t^{-3}}{r^{-3}t^{-5}}\right)^{-8}$

4. $\left\{\dfrac{6x^7y^{-3}}{(x^5y^{-3})(2xy^3)}\right\}^3$

5. $(5x^3y^{-3})^{-2}(2x^5y^{-4})^{-3}$

6. $\left(\dfrac{3p}{5q^{-3}}\right)^2\left(\dfrac{3q^4}{2p^2}\right)^{-3}$

7. $(4x^2y)^{-3}(x^{-5}y^6)^2(x^{-8}y^{-9})$

8. $(u^{-3}v^5)\left(\dfrac{9u^{-5}v^2}{3u^6v^{-8}}\right)$

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

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

MATH MONKS

Exponents Worksheet

Answers

1. $\dfrac{(-3)^7}{(-3)^2 \times (-3)^3}$

   9

2. $(-1)^3 \times (-1)^2 \times (-1)$

   1

3. $\left(\dfrac{r^2t^{-3}}{r^{-3}t^{-5}}\right)^{-8}$

   $\dfrac{1}{r^{40}t^{16}}$

4. $\left\{\dfrac{6x^7y^{-3}}{(x^5y^{-3})(2xy^3)}\right\}^3$

   $\dfrac{27x^3}{y^9}$

5. $(5x^3y^{-3})^{-2}(2x^5y^{-4})^{-3}$

   $\dfrac{y^{18}}{200x^{21}}$

6. $\left(\dfrac{3p}{5q^{-3}}\right)^2\left(\dfrac{3q^4}{2p^2}\right)^{-3}$

   $\dfrac{8p^8}{75q^6}$

7. $(4x^2y)^{-3}(x^{-5}y^6)^2(x^{-8}y^{-9})$

   $\dfrac{1}{64x^{24}}$

8. $(u^{-3}v^5)\left(\dfrac{9u^{-5}v^2}{3u^6v^{-8}}\right)$

   $\dfrac{3v^{15}}{u^{14}}$