

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# NEGATIVE / POSITIVE Exponents Worksheet

Solve.

1 a. $2^6$	1 b. $\left(\frac{5}{8}\right)^1$
2 a. $\left(-\frac{1}{4}\right)^{-1}$	2 b. $0.5^{-2}$
3 a. $\left(\frac{1}{3}\right)^{-3}$	3 b. $(-1)^{-23}$
4 a. $0.6^{-2}$	4 b. $\left(\frac{8}{9}\right)^2$
5 a. $\left(\frac{1}{2}\right)^{-5}$	5 b. $\left(-\frac{2}{3}\right)^{-3}$
6 a. $0.9^{-2}$	6 b. $\left(\frac{1}{3}\right)^1$
7 a. $\left(-\frac{3}{8}\right)^2$	7 b. $\left(\frac{4}{5}\right)^2$
8 a. $\left(\frac{1}{2}\right)^{-1}$	8 b. $0.8^2$
9 a. $0.4^2$	9 b. $5^1$
10 a. $(-100)^{-4}$	10 b. $0.2^2$

A. Complete the following chart.

Negative Exponents	Positive Exponents	Standard Form
1. $6^{-2}$	$(\frac{1}{6})^2$	$\frac{1}{36}$
2. $5^{-3}$		
3. $4^{-3}$		
4.	$(\frac{1}{5})^2$	
5.	$(\frac{2}{3})^3$	
6.		$\frac{25}{49}$
7.	$7^2$	
8. $(0.3)^{-3}$		
9.		$\frac{1}{27}$
10. $(-7)^{-2}$		
11.		$\frac{1}{8}$
12. $(-10)^{-3}$		

B. Write each in standard form.

1.  $5^3$

2.  $5^{-3}$

3.  $25^{-2}$

4.  $4^{-3}$

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

6.  $(\frac{2}{3})^{-3}$

7.  $(+3)^{-3}$

8.  $(-1.1)^{-2}$

9.  $(-8)^0$

10.  $(-5)^{-2}$

11.  $(-3)^{-3}$

12.  $(\frac{-3}{4})^{-4}$

C. Write each of the following in expanded exponential form.

1. 3.056

2. 9 300 000.2

3. 15.0076

4. 59.049

5. 6 506 300.23