

Pre-Algebra Review 4.6-4.8 Period 1

1	a^{mn}	1)	Simplify $a^m \cdot a^n$
2	a^{m-n}	2)	Simplify $\frac{a^m}{a^n}$
3	$a^{m \cdot n}$	3)	Simplify $(a^m)^n$
4	$\frac{1}{a^m}$	4)	Simplify a^{-m}
5	256	5)	Simplify $(-4)^4$
6	1024	6)	Simplify $4^2 \cdot 4^3$
7	$\frac{1}{27}$	7)	Simplify 3^{-3}
8	125	8)	Simplify $\frac{5^6}{5^3}$
9	$\frac{1}{64}$	9)	Simplify $(2^2)^{-3}$

10	$-6x^2y^4z^4$	10)	Simplify $3x^2y^3z \bullet -2yz^3$
11	$\frac{3a^3}{b^4}$	11)	Simplify $\frac{15a^3b}{5b^5}$
12	$16c^{-8}f^{12}g^{16}$	12)	Simplify $(-2c^{-2}f^3g^4)^4$
13	$\frac{16}{625x^{16}y^4z^{12}}$	13)	Simplify $\left(\frac{25x^5y}{10xz^{-3}}\right)^{-4}$
14	$2x^2 + 2x^3$	14)	Simplify $x^2(2 + 2x)$
15	$20y^2 + 15y + 10xy$	15)	Simplify $5y(4y + 3 + 2x)$
16	-256	16)	Simplify -4^4
17	-1.01, -1, -.89, -.57	17)	Graph on a number line: -1.01, -1, $-\frac{8}{9}$, $-\frac{4}{7}$
18	-1.414, -1.06, .3333, 0.4	18)	Graph on a number line: $\frac{1}{3}$, $-\sqrt{2}$, -1.06, 0.4

19	$\frac{15}{6}$	19)	Evaluate $\frac{x^2 - 4x^3 + 7y}{-x + 4}$ when $x = -2$ and $y = -3$
20	$-\frac{2}{5}$	20)	Evaluate $\frac{x(xy + 3)}{10}$ when $x = 4$ and $y = -1$
21	Natural, Rational, Integer, Rational, Whole, Irrational	21)	Draw the real number Venn diagram. Describe or define each kind of real number. Classify $3\sqrt{16}$, $\frac{2}{5}$, -17 , $2.\bar{6}$, 0 , and 4π . Be able to justify each classification.
22	-4	22)	Evaluate $\frac{ab^2 - 2a + 5b}{-ab}$ when $a = 1$ and $b = -2$
23	$\frac{n}{mp^8}$	23)	Simplify $\frac{m^3 n^6 p^4}{m^4 n^5 p^{12}}$
24	$-45x^{23}$	24)	Simplify $(5x)(-9x^{22})$