Exponential Laws #1

1) Please write the following as a single power using the exponent laws.

 a) b)  c) 

 d)  e)  f) 

 g) $x^{5}x^{4}$ h) $\frac{a^{8}}{a^{5}}$ i) $\left(y^{3}\right)^{5}$

 2) Write the following in expanded form and then evaluate.

 a) 35 b) 

 c) (-3)4 d) -34

 e)  f) (-5)1

 g) $\left(2^{2}\right)^{3}$ h) $\left(\frac{3}{4}\right)^{2}$

Exponential Laws #2

1) Please write the following as a single power using the exponent laws, remember to NOT leave

 any negative exponents or decimals. Do **NOT** evaluate.

 a) b)  c) 

 d)  e)  f) 

 g) $x^{-5}x^{4}x^{-3}$ h) $\frac{a^{8}}{a^{-5}}$ i) $\left(y^{-3}\right)^{15}$

 2) Evaluate the following, do NOT leave decimals answers, leave them in fraction form.

 a) 3-3 b) 

 c) (-1)12 d) -112

 e) $\left[\left(\frac{4}{3}\right)^{-2}\right]^{3}$ f) 20000

 g) $-\left(2^{-2}\right)^{-2}$ h) $\left(\frac{3}{4}\right)^{-2}$

Exponential Laws #3

1) Please write the following as a single power using the exponent laws, remember to NOT leave

 any negative exponents or decimals. Do **NOT** evaluate.

 a) b)  c) 

 d)  e)  f) 

 g) $\frac{x^{-5}x^{3}x^{-3}}{x^{10}}$ h) $\frac{bb^{8}}{b^{-5}}$ i) $\left(y^{-3}\right)^{-5}$

 2) Evaluate the following, do **NOT** leave decimals answers, leave them in fraction form.

 a) (-3) 3 b) 

 c) (-1)99 d) -1100

 e) $\left[\left(\frac{1}{5}\right)^{2}\right]^{-3}$ f) 343.2480

 g) $\left(5\right)^{-2}$ h) $\left(\frac{5}{4}\right)^{-1}$