**Exponent Worksheet #3 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Total = /47**

1. Simplify the following questions using exponent laws:

a) xmxn = b) (xy)m = c)  d) x0=

/7

e) = f) (xm)n = g) x-m =

2. Write as a single power.

a) (23)(22) = b) (n4)(n)= c) 36 × 32 = d) q7 × q2 =

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e) (32)3 = f) (m3)4 = g) (2t)3 = h) (ac)2 =

I) (2k4)3 = j) =

3. Simplify the following. Write your answers with positive exponents only.

a) = b)  = c) (-2a0b-3)2 = d) -5(a2b)0b-2 =

/11

e) = f) (4x)(3x3y) = g) (-2x)(3xy2)= h) =

i)  j)  k)

4. Evaluate the following:

a) 30 b) 2-3 c)  d) 

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e) 3-1  f) 2-3 x 22 g) (23)0 h) 

i)  j) -24 k) 3-1 + 3-2 l) -70

m) (3-1)(3-2) n) 2-2 + 2-3 - 23 o) (-2)4  p) (-7)0

q) 2-4  r) -3-1 + 3-2 s) (40 - 2-1)