Negative Indices

1. Write the following as fractions without indices:

a. 5^{-1} = b. 3^{-4} = c. 2^{-3} =

d. 10^{-2} = e. 4^{-3} = f. 3^{-3} =

g. 11^{-2} = h. 2^{-8} = i. 5^{-4} =

j. 2×3^{-2} = k. 3×3^{-4} = l. $2^{5} \times 10^{-4}$ =

2. Write the following fractions in index form:

a. $\frac{1}{2}$ = b. $\frac{1}{3}$ = c. $\frac{1}{7}$ =

d. $\frac{1}{5^3}$ = e. $\frac{1}{2^2}$ = f. $\frac{1}{8^7}$ =

3. Fill in the gaps to convert these fractions into index form:

a. $\frac{1}{25} = 5^{\square}$ b. $\frac{1}{16} = 2^{\square}$ c. $\frac{1}{27} = 3^{\square}$

d. $\frac{1}{100} = \square^{-2}$ e. $\frac{2}{9} = 2 \times 3^{\square}$ f. $\frac{4}{36} = 2^{\square} \times 6^{\square}$

g. $\frac{25}{64} = 5^{\square} \times 4^{\square}$ h. $\frac{8}{121} = \square^{\square} \times 11^{\square}$ i. $\frac{125}{27} = \square^{3} \times \square^{-3}$

4. Convert the following decimals into index form using negative indices:

a. 0.1 = b. 0.25 = c. 0.125 =

d. 0.0001 = e. 0.04 = f. 0.0625 =