Name: _____ Worksheet

Explain the relationship between numerators and denominators across equivalent fractions

Task A: Explain equivalence using scaling

1) What are the missing **numerators** and **denominators** in these pairs of **equivalent fractions**?

Use the stem sentences to explain how you know.

a) $\frac{1}{30} = \frac{3}{\square}$ b) $\frac{1}{8} = \frac{\square}{64}$ c) $\frac{2}{30} = \frac{\square}{15}$

d) $\frac{25}{50} = \frac{1}{\square}$ e) $\frac{\square}{10} = \frac{\square}{60}$ f) $\frac{1}{\square} = \frac{3}{\square}$

g) $\frac{\square}{7} = \frac{3}{\square}$ h) $\frac{1}{\square} = \frac{\square}{\square}$

The **numerator** and **denominator** have both been **scaled** by a factor of ____

2) Which **equivalent fractions** could be represented by these sentences?

a) _1_ out of _7_ is the same proportion of the whole as _3_ out of _21_

b) _5_ out of _30_ is the same proportion of the whole as _?_ out of _90_

c) _7_ out of _35_ is the same proportion of the whole as _1_ out of _?_

d) Which pairs of **equivalent fractions** could be represented by this sentence?

The **numerator** and **denominator** have both been **scaled** by a factor of 9

Task B: Compare fractions and identify equivalence

1)

a) Order these fractions from the smallest to the largest.

$\frac{1}{2}$ $\frac{3}{5}$ $\frac{3}{7}$ $\frac{1}{4}$ $\frac{3}{8}$

b) Write another 5 fractions equivalent to these and order them from smallest to largest.

c) Describe how the fractions in a) and b) are **equivalent** using **scaling** of the **numerators** and **denominators**.