**ORDERING FRACTIONS, DECIMALS, AND PERCENTAGES from smallest to largest.** ⅛⅙⅕**¼**⅓⅜⅖**½**⅗⅝⅔**¾**⅘⅚⅞ ⅛⅙⅕**¼**⅓⅜⅖**½**⅗⅝⅔**¾**⅘⅚⅞⅛⅙⅕**¼**⅓⅜⅖**½**⅗⅝⅔**¾**⅘⅚⅞

**Need to revise ordering decimals? Look at Ex 38, p 50 in green Workbook 1Need some help ordering fractions? Look at the fraction wall on p 42 of Workbook 2**

**To be able to order fractions, decimals and percentages, it may help to refer to this number line:**

**0 0.1 0.25 0.4 0.5 0.75 0.9 1**

 **1% 10% 25% 40% 50% 75% 90% 100%**

**I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I\_\_\_\_\_\_\_I**

$$\frac{1}{10}$$

**0.01 =** $\frac{1}{100}$

$\frac{1}{4}$

$\frac{2}{5}$

$\frac{1}{2}$

$\frac{3}{4} $

**When asked to order a group of fractions, decimals and percentages, here are some benchmarks to think about:**

* Is the number close to 0, or very small? e.g. 0.01 (=1% or 1 hundredth)
* Is the number close to $\frac{1}{2}$ or is it less or more than $\frac{1}{2}$ ?
* e.g., $\frac{2}{5}$ is less than $\frac{1}{2}$ while $\frac{3}{5}$ is more than $\frac{1}{2}$
* Is the number almost 1 whole? How close to 1 whole is it?

e.g. $\frac{7}{8}$ is more than $\frac{5}{6}$ because the missing portion is smaller.



* Lastly, you might find it helpful to convert some or all the values to decimals (or fractions or percentages where convenient) to be able to compare.

**Example: place these in order from smallest to largest:**

 **71% 0.02** $\frac{3}{4}$ $\frac{1}{8}$ **0.15**

0.02 is the smallest, $\frac{1}{8}$ = 0.125 so is smaller 0.15.

Of the large values, 71% is smaller than $\frac{3}{4}$ (remember $\frac{3}{4}$ is the same as 75%)

So your final order will be **0.02,** $\frac{1}{8}$ **0.15, 71%,** $\frac{3}{4}$

**TRY THE FOLLOWING EXAMPLES: Order from smallest to largest.**

1. $\frac{2}{3}$ 5% 0.3 89% 0.7
2. 25% 0.04 $\frac{4}{5}$ 2% 0.78
3. $\frac{3}{4}$ 45% 0.55 0.4 3%
4. 0.7 7% 0.1 0.67 $\frac{1}{3}$
5. 0.5 0.505 49% 0.05 $\frac{3}{4}$
6. $\frac{99}{100}$ 0.9 91% $\frac{7}{10}$ 0.89

**Answers: 1. 5% 0.3** ⅔ **0.7 89%**

 **2.** 2% **0.04 25%** 0.78 ⅘

 **3.** **3% 0.4 45% 0.55 ¾**

 **4. 7% 0.1** ⅓ **0.67 0.7**

 **5. 0.05 49% 0.5 0.505 ¾**

 **6. 7/10 0.89 0.9 91% 99/100**