

**Distributive property of an expression:**

$$(a + b) \cdot (c + d) = ?$$

Let's do the substitution:

$$a + b = u$$

Now let's use the distributive property:

$$(a + b) \cdot (c + d) = u(c + d) = uc + ud$$

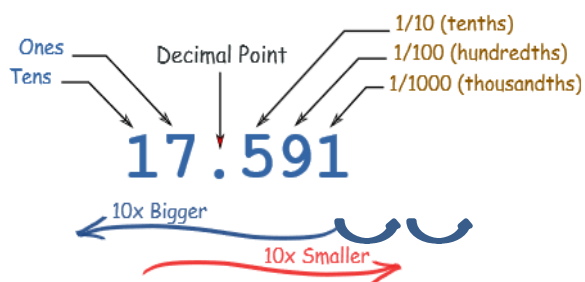
Now let's put back  $(a + b)$  instead of  $u$ :

$$uc + ud = (a + b)c + (a + b)d$$

Finally, let's use the distributive property again:

$$(a + b)c + (a + b)d = ac + bc + ad + bd$$

$$(a + b) \cdot (c + d) = ac + bc + ad + bd$$

**Decimals:**

- A **decimal number** is a **number** with a **decimal point** in it.
- The **number** to the left of the **decimal** is an ordinary whole **number**.
- The first **number** to the right of the **decimal** is the **number** of tenths (1/10's).
- The second is the **number** of hundredths (1/100's) and so on.