6.NS Tenths of (and So On)

Task

Since $0.1 = \frac{1}{10}$, when we multiply by 0.1, we are multiplying by one-tenth.

a. Multiply:

- 0.1×100
- 0.1×10
- 0.1×1
- 0.1×0.1
- 0.1×0.01
- 0.1×0.001

b. Describe the patterns you see in the products above.

Similarly, since $0.01 = \frac{1}{100}$, when we multiply by 0.01, we are multiplying by one-hundredth.

c. Multiply:

- 0.01×100
- 0.01×10
- 0.01×1
- 0.01×0.1
- 0.01×0.01
- 0.01×0.001

d. Describe the patterns you see in the products above.

Based only on the patterns above, what do you expect 0.0001×0.00001 to be? Explain why that must be true by thinking of these decimals as fractions.