

Rounding

Decimal Places (dp)

- When we round to decimals, we start counting as soon as we reach the decimal point.

Round 17.46789 to 2 decimal places

1 decimal place

2 decimal places, this will stay a 6 or go to a 7 depending on what the next number is

Significant Figures (sf)

- When we round to significant figures, we start counting as soon as we reach a **number that is not zero**

Round 17.46789 to 2 significant figures

Round to **1** sf

378537

Round to **3** sf

378437

Round to 2 sf

0.00289

Round to 3 sf

0.002087

Rounding to Significant Figures

1. What is the difference between rounding to significant figures and rounding to decimal places?
2. Round the following numbers to a) 1 sig fig b) 2 sig fig c) 3 sig fig
 - i. 1463.8
 - ii. 157.26
 - iii. 37.096
 - iv. 6.0936
 - v. 0.006403
3. Work out the following on a calculator and give the answer to 2 significant figures:
 - a. $\sqrt{22}$
 - b. $\frac{3.2 \times 0.2^2}{2.3}$
 - c. $\sqrt{\frac{4.44 \times 0.3^2}{11}}$
 - d. $\frac{\pi \times 17}{0.1} + \sqrt{14}$