

Rounding to Decimal Places

Rounding a decimal involves shortening it to a given number of decimal places. This is an **approximation** of the original number.

 **Example** Round 3.8742 to 1 and 2 decimal places.

Check the next digit to the **right**. If this digit is:
↑ 5 or more, round **up**.
↓ 4 or less, round **down**.

1 decimal place

3.8742

Our answer will not include any digits after the first decimal place.

1st decimal place

3.8742 is between
3.8 and 3.9

Check the hundredths digit (to the **right**).
This digit is **7** so we round **up**.

3.8742 = 3.9(1 dp)

2 decimal places

3.8742

Our answer will not include any digits after the second decimal place.

2nd decimal place

3.8742 is between
3.87 and 3.88

Check the thousandths digit (to the **right**).
This digit is **4** so we round **down**.

3.8742 = 3.87(2 dp)