

Rounding

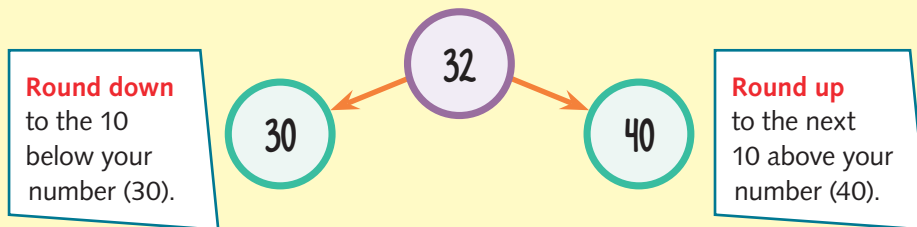
- Round numbers to the nearest 10, 100, 1000
- Round numbers to the nearest 10000 or 100000

Rounding Numbers

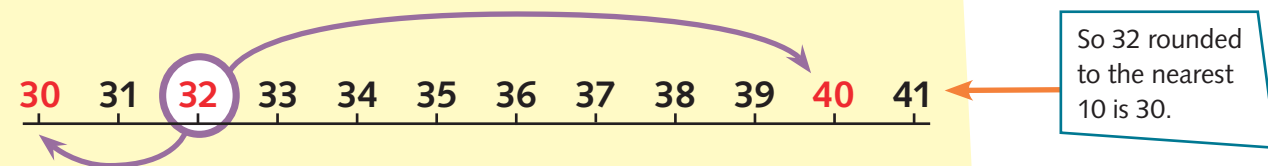
Rounding numbers makes them easier to work with and can help you to estimate answers to calculations.

Example

To round **32** to the nearest **10**, you have a choice of rounding to 30 or 40:



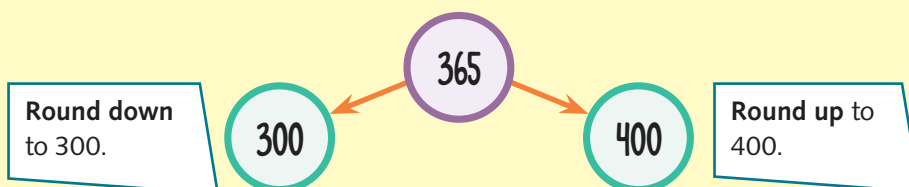
When you look at a number line, you can see that 32 is nearer to 30 than 40. So you round 32 down to 30.



The key for rounding to the nearest 10 is the **units**. If the units are less than 5, you **round down**. If the units are 5 or above, you **round up**.

Example

Round 365 to the nearest 100.



The key for rounding to the nearest 100 is the **tens** column. If the tens digit is less than 5, **round down**. If the tens digit is 5 or above, **round up**.

Key Point

When you round numbers, you are asked to round them '**to the nearest...**' 10, 100, 1000, etc.

Tip

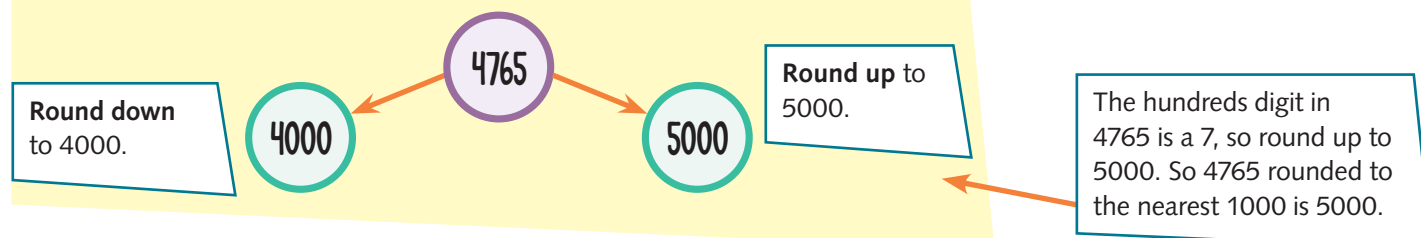
You could sketch a number line to help you. On a number line you would see that 365 is nearer 400 than 300.

The tens digit in 365 is a 6, so you round up to 400. So 365 rounded to the nearest 100 is 400.

To round to the nearest 1000, you need to look at the **hundreds** column. If the hundreds digit is 5 or above, **round up**. If the hundreds digit is below 5, **round down**.

Example

Round 4765 to the nearest 1000.



Rounding to the Nearest 10 000 or 100 000

To round to the nearest 10 000, look at the **thousands** digit. If it is 5 or above, **round up**. If it is below 5, **round down**.

Example

23 725 to the nearest 10 000 would round down to 20 000 because the thousands digit is a 3.

To round to the nearest 100 000, you look at the **tens of thousands** digit. If it is 5 or above, **round up**. If it is below 5, **round down**.

Example

583 725 to the nearest 100 000 would round up to 600 000 because the tens of thousands digit is an 8.



Quick Test

1. Round 64 318 to the nearest:
a) 10 b) 100 c) 1000 d) 100 000

Key Words

- Round down
- Round up