

Today, we are revising rounding numbers

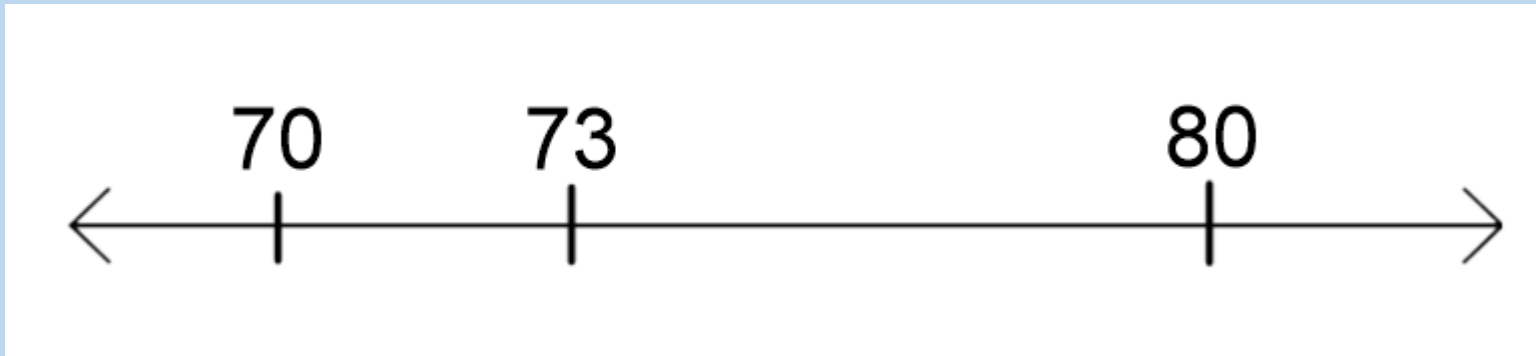
- To the nearest 10
- To the nearest 100
- To the nearest 1,000
- To the nearest 10,000
- To the nearest 100,000

What is rounding?

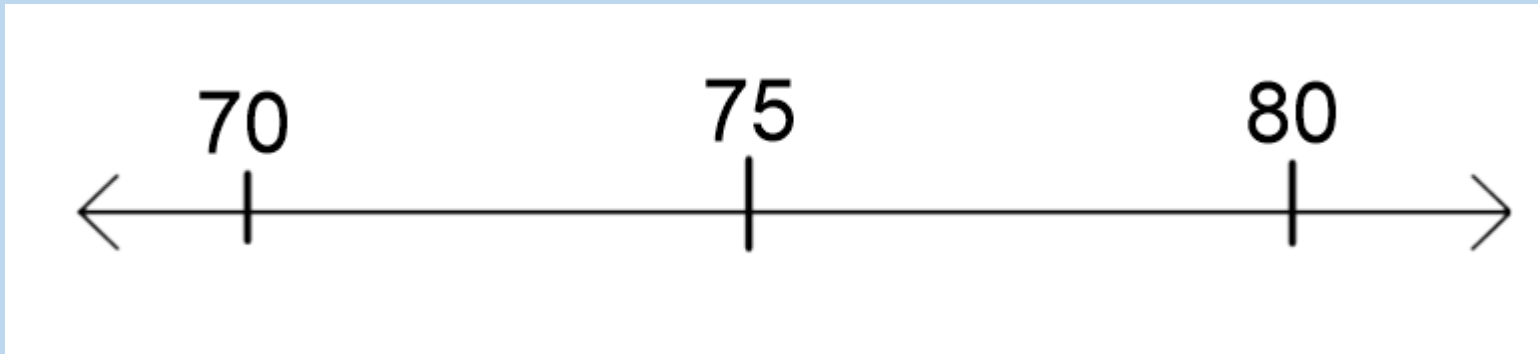
- Rounding means making a number simpler but still keeping its value close to what it was.
- The result is less accurate but easier to use.
- For example $4,000 \times 10$ is far easier to calculate than $3,952 \times 9$

Another example

73 rounded to the nearest 10 is 70 because 73 is closer to 70 than it is to 80.



What about 75?



75 is exactly halfway between 70 and 80, so mathematicians always follow the rule of rounding **up** when the last digit is a 5.

Try rounding these numbers to the nearest 10...

- 91

- 17

- 55

Answers

- $91 = 90$
- $17 = 20$
- $55 = 60$

Easy right?

However, things get trickier when you are looking at larger numbers AND you do different types of rounding e.g. to the nearest 100, nearest 1000, nearest 10000 and nearest 100000.

This chart can help...

The blue box shows the digit you need to look at and ask “Is this less or more than 5?”

The yellow box shows you the digit that will need to change if you are rounding up.

	M	HTh	TTh	Th	H	T	O
nearest 10							
nearest 100							
nearest 1,000							
nearest 10,000							
nearest 100,000							

So, if you are thinking about the number 1,436,763 and you want to round it to the nearest 10...

	M	HTh	TTh	Th	H	T	O
nearest 10	1	4	3	6	7	6	3
nearest 100							
nearest 1,000							
nearest 10,000							
nearest 100,000							

This is less than 5, so the 6 does not change.

So the answer is:

1,436,760

If you are thinking about the number
1,436,763 and you want to round it to the nearest
100...

	M	HTh	TTh	Th	H	T	O
nearest 10							
nearest 100	1	4	3	6	7	6	3
nearest 1,000							
nearest 10,000							
nearest 100,000							

This is more than 5, so the
7 does change.

So the answer is:

1,436,800

If you are thinking about the number
1,436,763 and you want to round it to the nearest
1,000...

	M	HTh	TTh	Th	H	T	O
nearest 10							
nearest 100							
nearest 1,000	1	4	3	6	7	6	3
nearest 10,000							
nearest 100,000							

This is more than 5, so the
6 does change.

So the answer is:

1,437,000

If you are thinking about the number
1,436,763 and you want to round it to the nearest
10,000...

	M	HTh	TTh	Th	H	T	O
nearest 10							
nearest 100							
nearest 1,000							
nearest 10,000	1	4	3	6	7	6	3
nearest 100,000							

This is more than 5, so the
3 does change.

So the answer is:

1,440,000

If you are thinking about the number 1,436,763 and you want to round it to the nearest 100,000...

	M	HTh	TTh	Th	H	T	O
nearest 10							
nearest 100							
nearest 1,000							
nearest 10,000							
nearest 100,000	1	4	3	6	7	6	3

This is less than 5, so the 4 does not change.

So the answer is:

1,400,000

Try these...

- round 1,718 to the nearest 10
- round 15,360 to the nearest 100
- round 53,285 to the nearest 1000
- round 63,742 to the nearest 10,000
- round 647,926 to the nearest 100,000

	M	HTh	TTh	Th	H	T	O
nearest 10						■	■
nearest 100					■	■	
nearest 1,000				■	■		
nearest 10,000			■	■			
nearest 100,000		■	■				

Answers...

- round 1,718 to the nearest 10 = 1,720
- round 15,360 to the nearest 100 = 15,400
- round 53,285 to the nearest 1000 = 53,000
- round 63,742 to the nearest 10,000 = 60,000
- round 647,926 to the nearest 100,000 = 600,000

	M	HTh	TTh	Th	H	T	O
nearest 10						Yellow	Cyan
nearest 100					Yellow	Cyan	
nearest 1,000				Yellow	Cyan		
nearest 10,000			Yellow	Cyan			
nearest 100,000		Yellow	Cyan				

If you are ready, try the Independent Practice task.

- Use the chart if it helps you
- Mark your own work using the answer sheet
- Good luck!