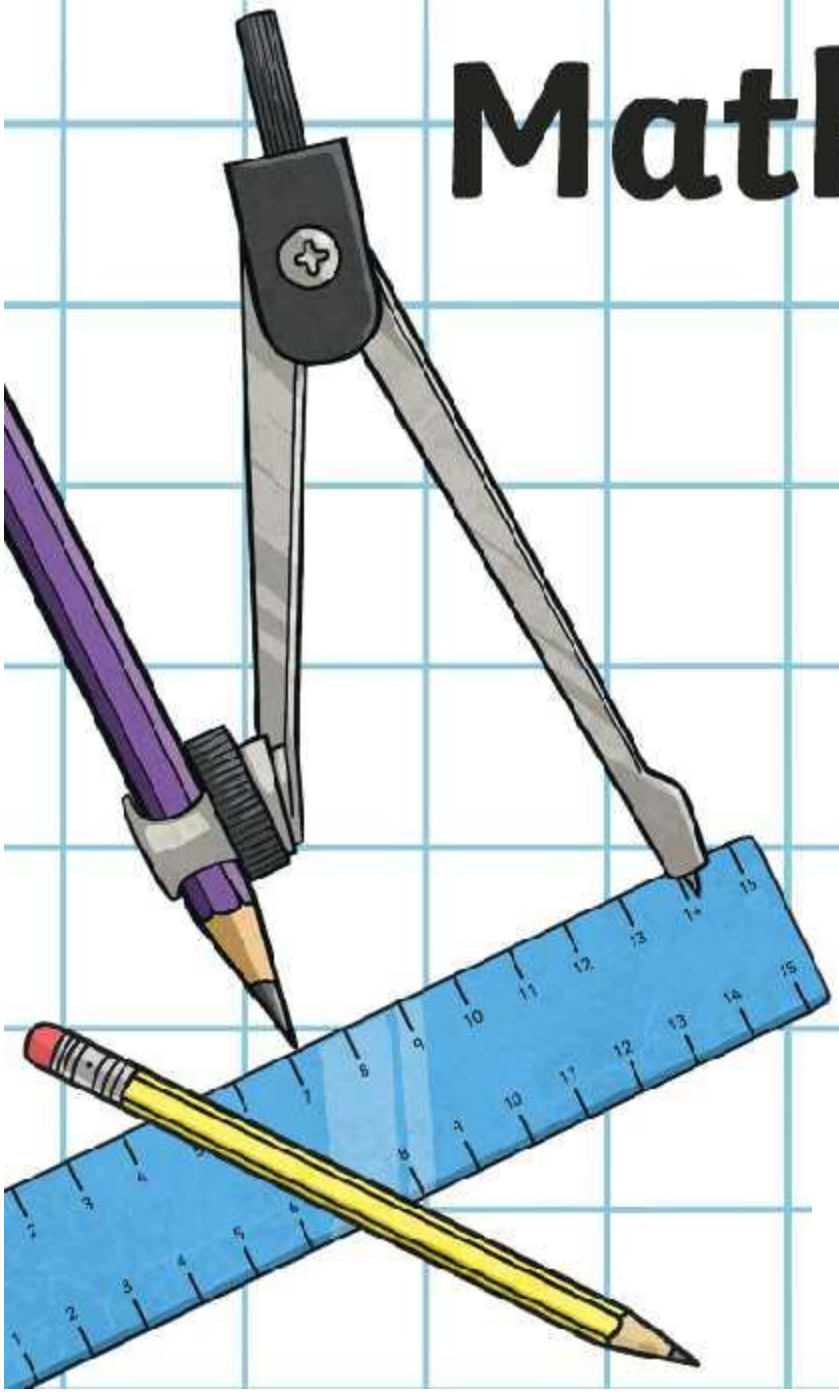
Maths Mastery

Rounding to Check Answers



What is Rounding?

Rounding is a great way to make a number simpler and keeping the number close to the value that it was.
For example:
These numbers are rounded to the closest 10
68 → 70
23 → 20

Numbers can also be rounded to the nearest 100
7183 → 7200
4109 → 4100

Or even the nearest .100 (one hundredth)
10.123 → 10.12
14.667 → 14.67

What is Estimating?

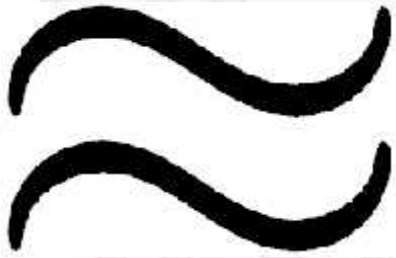
We use estimation in mathematics when we are not trying to get the exact answer.

Estimation is finding an answer or number that is close enough to the correct answer.

It is a quick way to get close to the answer.

Estimation is good for your brain and can be fun to try and work out the answer quickly that is close enough to the answer.

When estimating we use the approximately symbol.



Rounding to Estimate - Addition

For these calculations, what rounded calculation would you use to check the answer:

3487 + 2725 = 6212	3500 + 2700 = 6200
5892 + 614 = 6506	5900 + 600 = 6500
7523 + 3892 = 11 415	7500 + 3900 = 11 400
713 + 4661 = 5374	700 + 4700 = 5400

Rounding to Estimate- Addition

For these calculations, what rounded calculation would you use to check the answer:

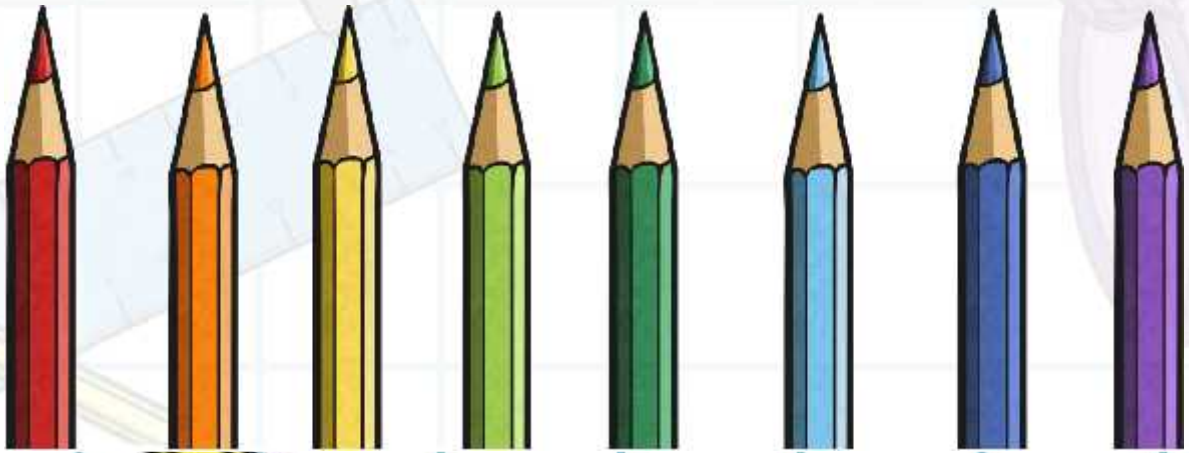
5387 – 2025 = 3362	5400 – 2000 = 3400
7296 - 714 = 6582	7300 – 700 = 6600
8952 – 5773 = 3179	9000 – 5 800 = 3200
10 303 – 6281 = 4022	10 300 – 6300 = 4000

Determine when 'Estimation' has been used?

Alex looked at the number of pencils in the first pencil pot and then counted how many pencil pots were in the class and gave an approximate answer.

or

Alex collected all the pots in a class then counted the number of pencils in the first number pot and multiplied the answer by the number of pots in the classroom, therefore correctly identifying the number of pencils in each class.



Determine when 'Rounding' has been used?

Sarah was working on some addition and subtraction equations and was solving the equations to find the answer. Which equations did Sarah solve using Rounding?

3482 + 2375 =

3400 + 2300 ≈ 5700

3482 + 2375 =

3400 + 82 + 2300 + 75 = 5857

4238 + 2999 =

4200 + 3000 ≈ 7200

4238 + 2999 = 4200 + 38 + 3000 – 1 = 7237

6528 – 3321 =

6500 – 3300 ≈ 3200

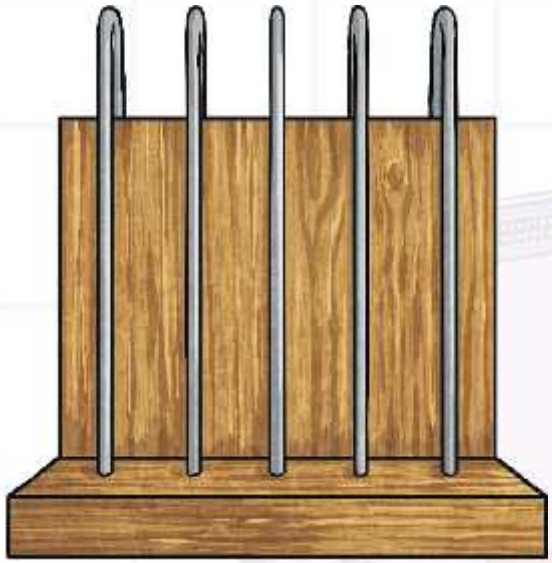
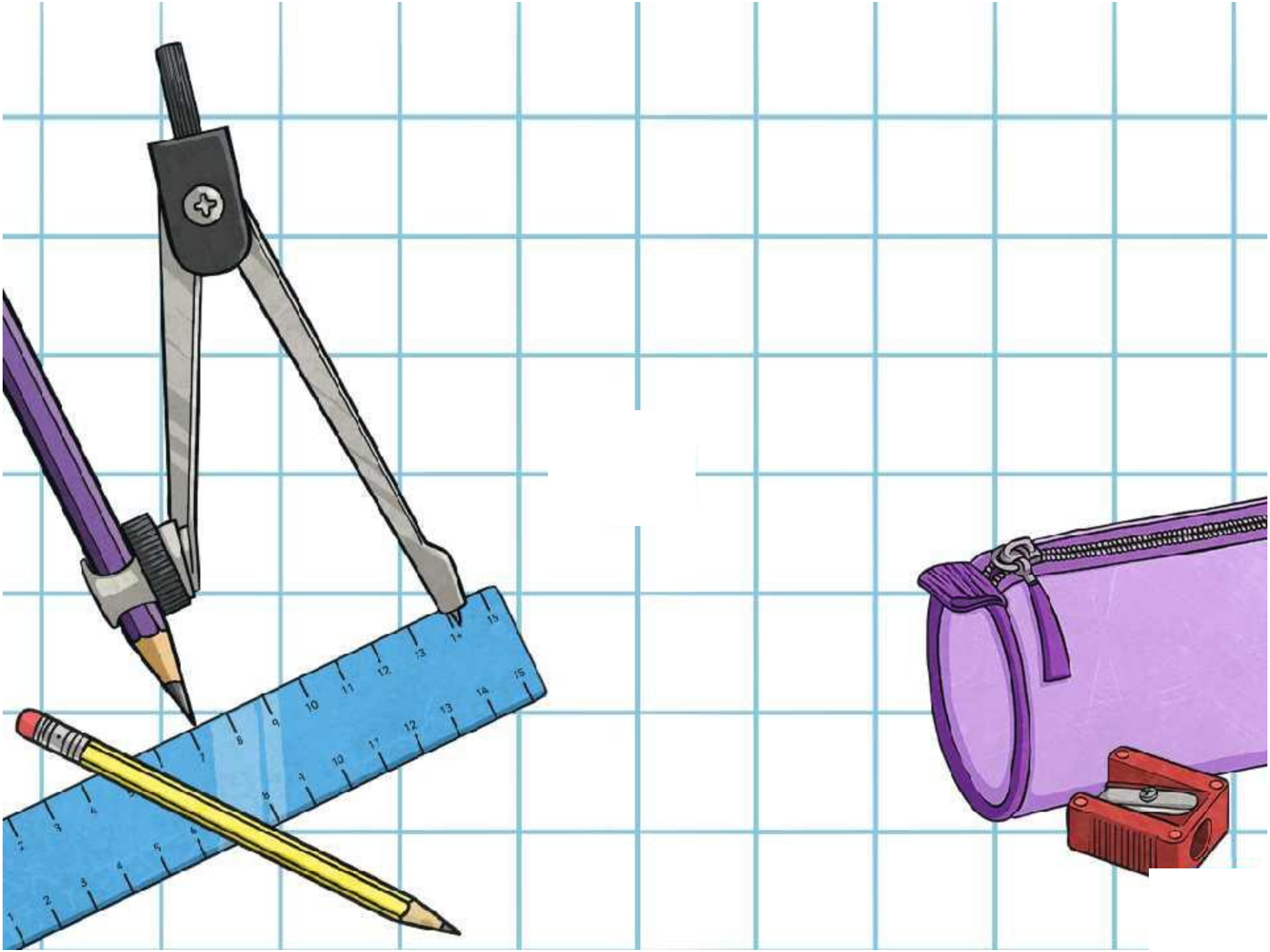
(6500 + 21) – (3300+21) = 3207

Your Turn

Complete these questions by estimating and using rounding to help you find the approximate answer.

1. 4873 + 3657 ≈
2. 5281 + 1362 ≈
3. 4837 + 3384 ≈
4. 9377 + 321 ≈
5. 9877 – 3827 ≈
6. 7362 – 1982 ≈
7. 8372 – 5572 ≈
8. 8362 – 4231 ≈

Your Turn - Answers

Complete these questions by estimating and using rounding to help you find the approximate answer.

1. 4873 + 3657 ≈ **4900 + 3700 = 8600**
2. 5281 + 1362 ≈ **5300 + 1400 = 6700**
3. 4837 + 3384 ≈ **4800 + 3300 = 8100**
4. 9377 + 321 ≈ **9300 + 300 = 9600**
5. 9877 – 3827 ≈ **9900 – 3800 = 6100**
6. 7362 – 1982 ≈ **7400 – 2000 = 5400**
7. 8372 – 5572 ≈ **8400 – 5600 = 2800**
8. 8362 – 4231 ≈ **8400 – 4200 = 4200**