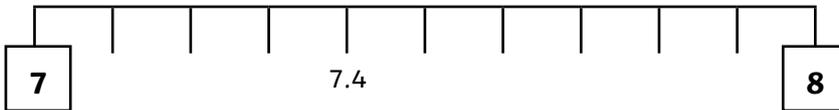


- 2) a) 6.2 is closer to 6 than 7.  
 6.2 rounds to 6 to the nearest whole number.  
 6.7 is closer to 7 than 6.  
 6.7 rounds to 7 to the nearest whole number.

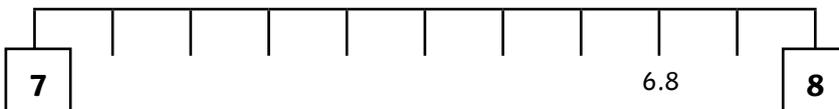
- b) 8.4 is closer to 8 than 9.  
 8.4 rounds to 8 to the nearest whole number.  
 8.9 is closer to 9 than 8.  
 8.9 rounds to 9 to the nearest whole number.

- c) 10.3 is closer to 10 than 11.  
 10.3 rounds to 10 to the nearest whole number.  
 10.6 is closer to 11 than 10.  
 10.6 rounds to 11 to the nearest whole number.

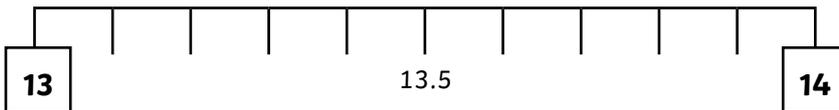
- 3) a) 7.4 rounds to 7 to the nearest whole number.



- b) 6.8 rounds to 7 to the nearest whole number.



- c) 13.5 rounds to 14 to the nearest whole number.





- 1) Toni is correct. If the tenths digit of a number with one decimal place is a 5, the number is rounded up to the next whole number.
- 2) a) 4.5     5.4     4.4     5.5     5.1
- b) 4.5 rounds up to 5 because the tenths digit is a 5 which is exactly half way between 4 and 5. If a tenths digit is 5, we round up to the next number.
- 5.4 is between 5 and 6. The tenths digit is less than 5 and is closer to 5. Therefore, we round this number to 5.
- 5.1 is between 5 and 6. The tenths digit is less than 5 and is closer to 5. Therefore, we round this number to 5.
- c) Other numbers that round to 5 are: 4.6    4.7    4.8    4.9    5.0    5.2    5.3
- 3) 12.5 rounds to 13 and this has a 5 as the tenths digit.



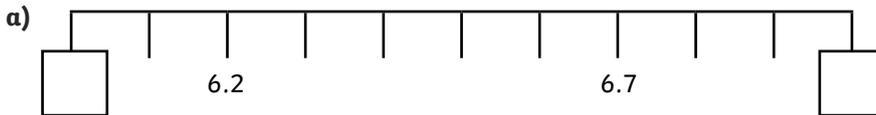
- 1) a) The smallest answer Jan is thinking of could be 27.5 as this is the smallest number that rounds up to 28.
- b) The largest answer Jan is thinking of could be 28.4 as this is the largest number that rounds down to 28.
- 2) a) 6.5m    7.0m  
6.6m    7.1m  
6.7m    7.2m  
6.8m    7.3m  
6.9m    7.4m
- 3) True. When you round the children's distances and add together this equals 30m. Willow's throw must round to 7m. This means that her throw is between 6.5m and 7.4m. This would be greater than Jayden's throw and less than Kiran's.



1) Complete the number lines by writing the missing integers.



2) Complete the number lines and statements to describe how the numbers are rounded.

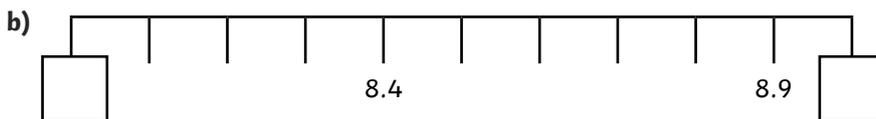


6.2 is closer to 6 than 7.

6.2 rounds to 6 to the nearest whole number.

6.7 is closer to \_\_\_\_\_ than \_\_\_\_\_.

6.7 rounds to \_\_\_\_\_ to the nearest whole number.

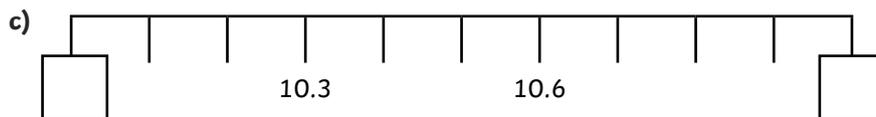


\_\_\_\_\_ is closer to \_\_\_\_\_ than \_\_\_\_\_.

\_\_\_\_\_ rounds to \_\_\_\_\_ to the nearest whole number.

\_\_\_\_\_ is closer to \_\_\_\_\_ than \_\_\_\_\_.

\_\_\_\_\_ rounds to \_\_\_\_\_ to the nearest whole number.



\_\_\_\_\_ is closer to \_\_\_\_\_ than \_\_\_\_\_.

\_\_\_\_\_ rounds to \_\_\_\_\_ to the nearest whole number.

\_\_\_\_\_ is closer to \_\_\_\_\_ than \_\_\_\_\_.

\_\_\_\_\_ rounds to \_\_\_\_\_ to the nearest whole number.

3) Draw your own number lines to round these numbers to the nearest whole number.

Complete this sentence for each one:

\_\_\_\_\_ rounds to \_\_\_\_\_ to the nearest whole number.

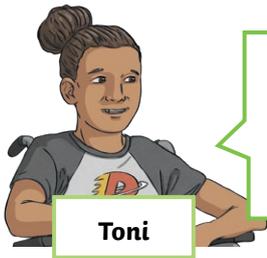
a) 7.4

b) 6.8

c) 13.5



1) Toni and Sajid are rounding 2.5 to the nearest whole number.



2.5 rounds to 3 to the nearest whole number.

Toni



2.5 rounds to 2 to the nearest whole number.

Sajid

Who is correct? Explain how you know who has rounded 2.5 correctly.

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2) Jude is thinking of a number with one decimal place. Rounded to the nearest whole number, the number is 5.

a) Tick which of these could be Jude's number:

4.5     5.4     4.4     5.5     5.1

b) Explain why you think these numbers round to 5.

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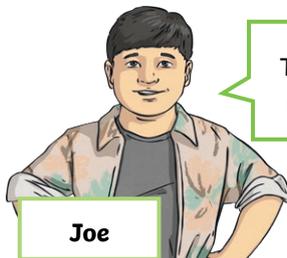
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c) Write one other number with one decimal place which would round to 5.

---

3) When a number with one decimal place is rounded to the nearest whole number, it rounds to 13.



The number won't have a 5 as the tenths digit.

Joe

Explain why Joe is wrong and give an example to prove this.

---

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1)



A number with one decimal place is rounded to 28.



a) What is the smallest possible number that Jan could be thinking of? Explain how you know.

---

---

b) What is the largest possible number that Jan could be thinking of? Explain how you know.

---

---

2) Here are the results of how far a group of children could hit a ball with a bat:

Name	Distance
Trixie	9.6m
Jayden	6.3m
Kiran	8.8m
Izaak	4.5m
Willow	



The children's individual throws are rounded to the nearest whole number.

When the rounded numbers are added together, the total distance thrown is 37m.

a) Write all the possible distances that Willow could have thrown. Explain how you know.

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b) Willow's throw is greater than Jayden's throw but less than Kiran's throw. Is this true or false?

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Diving into Mastery



# Round Decimals

# Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



**Diving**



**Deeper**



**Deepest**

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

# Aim

- Round decimals with one decimal place to the nearest whole number.

## Round Decimals

## Diving



What are the integers at the start and end of this number line?



Complete the number lines and statements to describe how the numbers are rounded.



2.3 is closer to **2** than **3**.

2.3 rounds to **2** to the nearest whole number.

2.7 is closer to **3** than **2**.

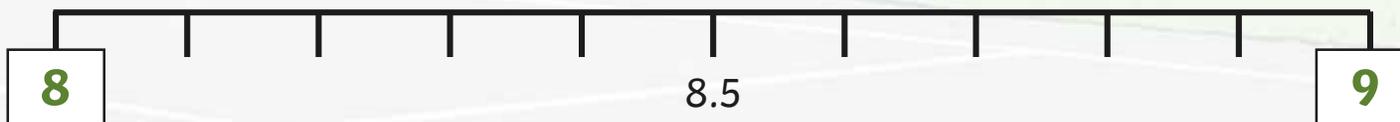
2.7 rounds to **3** to the nearest whole number.

## Round Decimals

## Diving



Use a number line to help round 8.5 to the nearest whole number.



8.5 rounds to 9. If the tenths digit is a five, you round up to the next whole number.

8.5 rounds to 9 to the nearest whole number.

## Round Decimals

## Deeper



Tia is thinking of a number with one decimal place. Rounded to the nearest whole number, the number is 9.



Which of these could be Tia's number?

9.2 ✓

9.5

9.8

8.5 ✓

Explain why you think these numbers round to 9.

9.2 has less than 5 tenths so it is closer to 9 than 10. Therefore, 9.2 rounds to 9 not 10.

8.5 rounds to 9. If the tenths digit is 5 or above, the number rounds up to the next whole number.

Write one other number with one decimal place which would round to 9.

Other numbers that round to 9 are: 8.6 8.7 8.8 8.9 9.0 9.1 9.3  
9.4

## Round Decimals

## Deepest



A number with one decimal place is rounded to 32.

What is the smallest possible number that Jo can be thinking of?

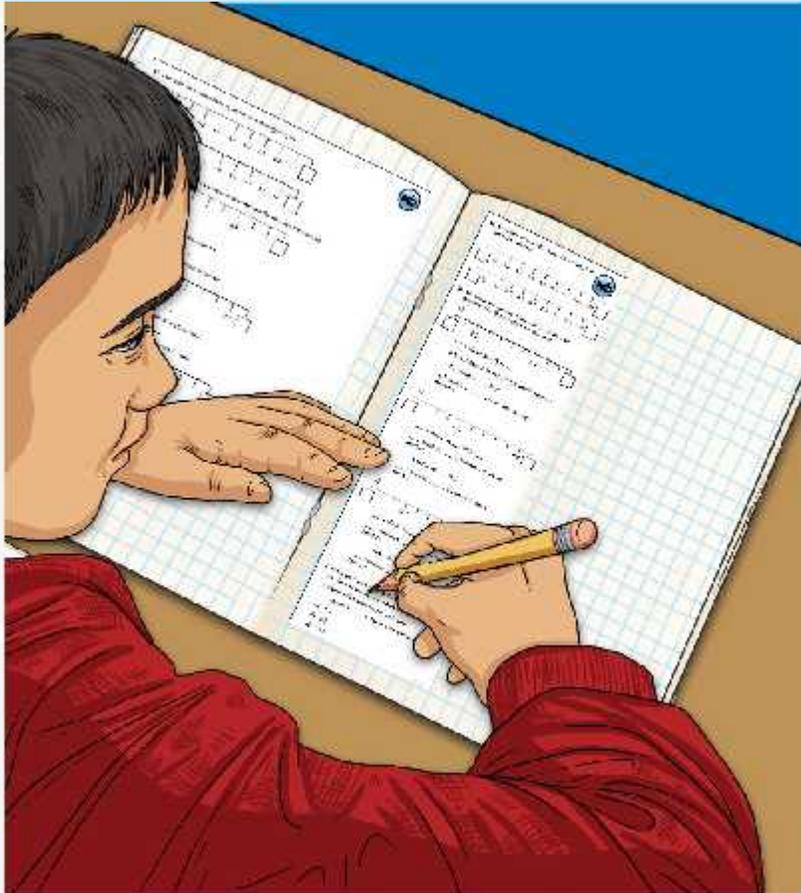
smallest = 31.5

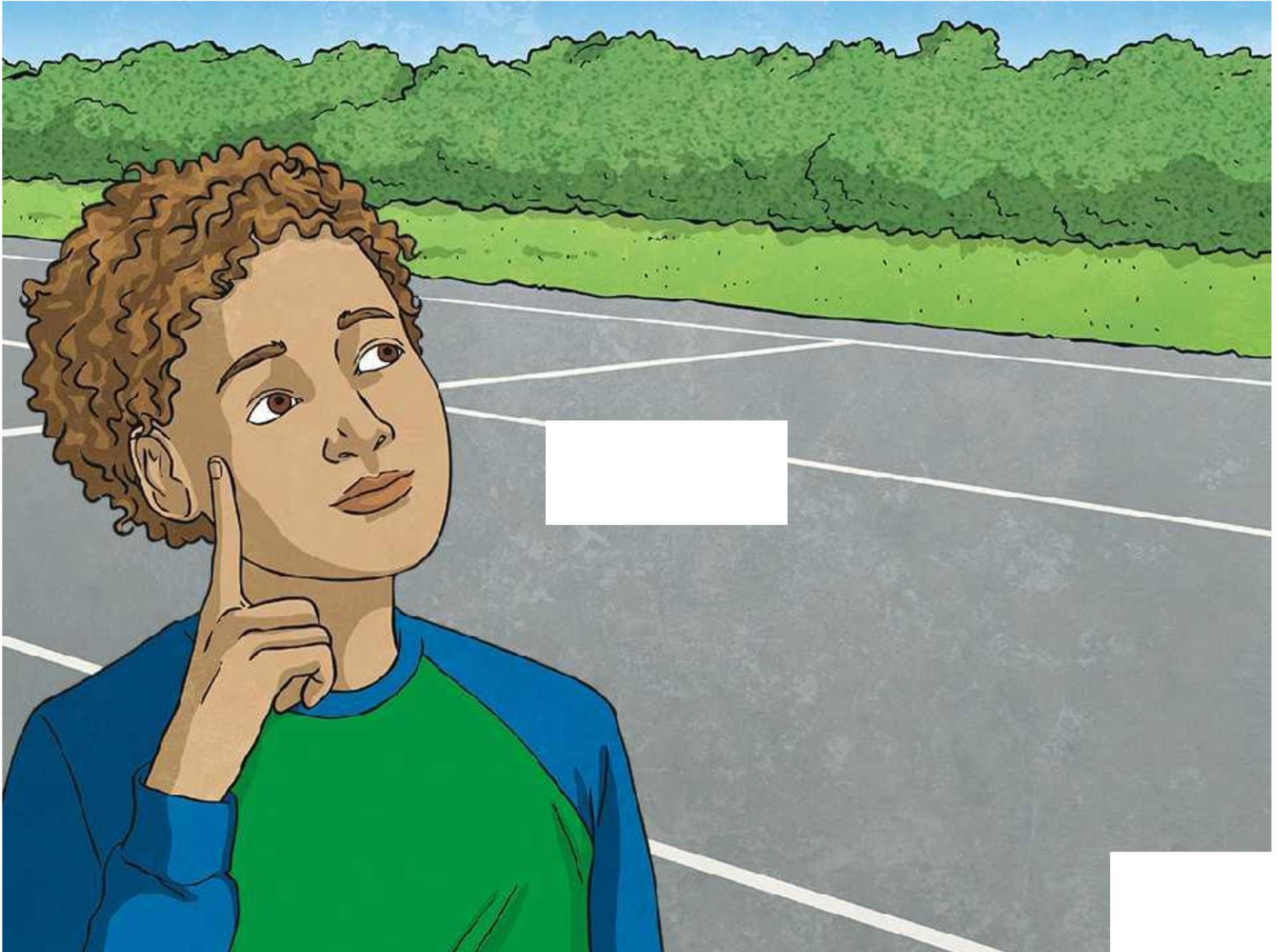
What is the largest possible number that Jo can be thinking of?

largest = 32.4

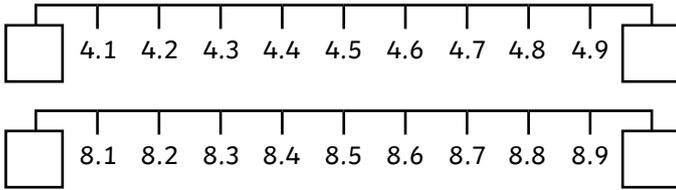
## Round Decimals

Dive in by completing your own activity!

A worksheet titled "Round Decimals" with a grid background. It contains several math problems involving rounding numbers to different place values. The problems are numbered 1 through 10. Each problem includes a number line and a set of instructions. The problems are:  
1. Round the decimal 4.6 to the nearest whole number.  
2. Round the decimal 3.2 to the nearest whole number.  
3. Round the decimal 5.8 to the nearest whole number.  
4. Round the decimal 1.1 to the nearest whole number.  
5. Round the decimal 2.9 to the nearest whole number.  
6. Round the decimal 7.4 to the nearest whole number.  
7. Round the decimal 8.1 to the nearest whole number.  
8. Round the decimal 9.5 to the nearest whole number.  
9. Round the decimal 0.5 to the nearest whole number.  
10. Round the decimal 1.5 to the nearest whole number.  
The worksheet also includes a small logo in the top right corner.

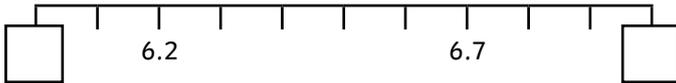


- 1) Complete the number lines by writing the missing integers.



- 2) Complete the number lines and statements to describe how the numbers are rounded.

a)



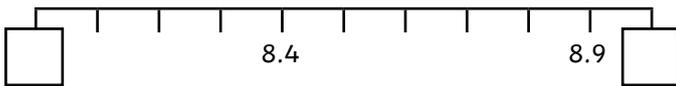
6.2 is closer to 6 than 7.

6.2 rounds to 6 to the nearest whole number.

6.7 is closer to \_\_\_ than \_\_\_.

6.7 rounds to \_\_\_ to the nearest whole number.

b)



\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

c)



\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

- 3) Draw your own number lines to round these numbers to the nearest whole number.

Complete this sentence for each one:

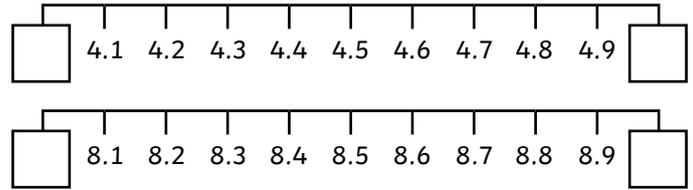
\_\_\_ rounds to \_\_\_ to the nearest whole number.

a) 7.4

b) 6.8

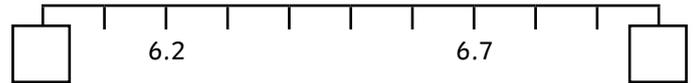
c) 13.5

- 1) Complete the number lines by writing the missing integers.



- 2) Complete the number lines and statements to describe how the numbers are rounded.

a)



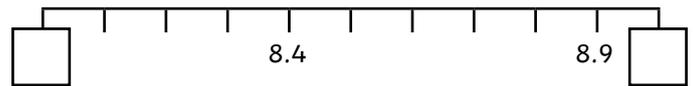
6.2 is closer to 6 than 7.

6.2 rounds to 6 to the nearest whole number.

6.7 is closer to \_\_\_ than \_\_\_.

6.7 rounds to \_\_\_ to the nearest whole number.

b)



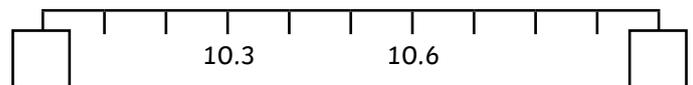
\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

c)



\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

\_\_\_ is closer to \_\_\_ than \_\_\_.

\_\_\_ rounds to \_\_\_ to the nearest whole number.

- 3) Draw your own number lines to round these numbers to the nearest whole number.

Complete this sentence for each one:

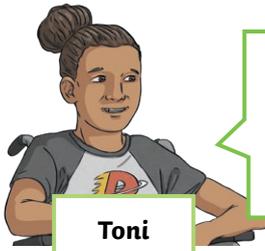
\_\_\_ rounds to \_\_\_ to the nearest whole number.

a) 7.4

b) 6.8

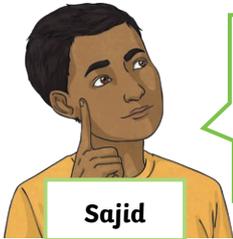
c) 13.5

- 1) Toni and Sajid are rounding 2.5 to the nearest whole number.



2.5 rounds to 3 to the nearest whole number.

Toni



2.5 rounds to 2 to the nearest whole number.

Sajid

Who is correct? Explain how you know who has rounded 2.5 correctly.

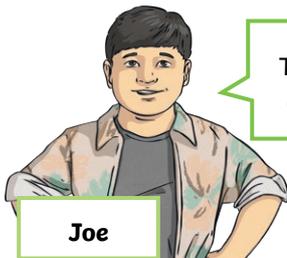
- 2) Jude is thinking of a number with one decimal place. Rounded to the nearest whole number, the number is 5.

- a) Tick which of these could be Jude's number.

4.5    5.4    4.4    5.5    5.1

- b) Explain why you think these numbers round to 5.  
c) Write one other number with one decimal place which would round to 5.

- 3) When a number with one decimal place is rounded to the nearest whole number, it rounds to 13.

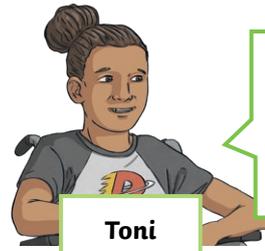


The number won't have a 5 as the tenths digit.

Joe

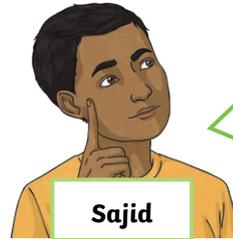
Explain why Joe is wrong and give an example to prove this.

- 1) Toni and Sajid are rounding 2.5 to the nearest whole number.



2.5 rounds to 3 to the nearest whole number.

Toni



2.5 rounds to 2 to the nearest whole number.

Sajid

Who is correct? Explain how you know who has rounded 2.5 correctly.

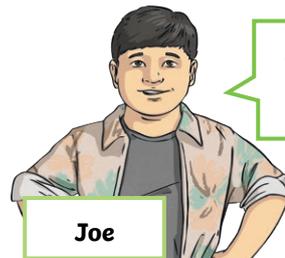
- 2) Jude is thinking of a number with one decimal place. Rounded to the nearest whole number, the number is 5.

- a) Tick which of these could be Jude's number.

4.5    5.4    4.4    5.5    5.1

- b) Explain why you think these numbers round to 5.  
c) Write one other number with one decimal place which would round to 5.

- 3) When a number with one decimal place is rounded to the nearest whole number, it rounds to 13.



The number won't have a 5 as the tenths digit.

Joe

Explain why Joe is wrong and give an example to prove this.

1)



A number with one decimal place is rounded to 28.



- a) What is the smallest possible number that Jan could be thinking of? Explain how you know.
- b) What is the largest possible number that Jan could be thinking of? Explain how you know.

2) Here are the results of how far a group of children could hit a ball with a bat:

Name	Distance
Trixie	9.6m
Jayden	6.3m
Kiran	8.8m
Izaak	4.5m
Willow	

The children's individual throws are rounded to the nearest whole number.

When the rounded numbers are added together, the total distance thrown is 37m.

- a) Write all the possible distances that Willow could have thrown.
- b) Willow's throw is greater than Jayden's throw but less than Kiran's throw. Is this true or false? Explain how you know.



1)



A number with one decimal place is rounded to 28.



- a) What is the smallest possible number that Jan could be thinking of? Explain how you know.
- b) What is the largest possible number that Jan could be thinking of? Explain how you know.

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- a) Write all the possible distances that Willow could have thrown.
- b) Willow's throw is greater than Jayden's throw but less than Kiran's throw. Is this true or false? Explain how you know.

