

What do you need to know?

In **Statement Logic** questions you will be given some information. Your job is to find the answer option that is **definitely true** based on the information you've been given. You might be given a picture or some sentences.

You **cannot** use any **extra information** that you might know - the skill is to **only** use the information in front of you!

A **statement** is a sentence that gives you information.

In these questions, a statement is **definitely true** when you can **prove** it using **only** the information you've been given. It can't be a statement which is probably true: it must be **definitely true**!

For example, you might know that bears nearly always have sharp teeth, but unless the question tells you this you can't **assume** that bears have sharp teeth. They might have fallen out!



Key Skills:

There are some key skills you will need to work out which answer is **definitely true**:

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| Logic & Deduction | Using the information you are given to work out other information | <ul style="list-style-type: none"> ★ Read lots of books with mysteries in and see if you can solve the mystery before the end! ★ Play board games that involve logic, like Cluedo and Mastermind! |
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| Fact-Checking | Being able to check your answers against the information given in the question | <ul style="list-style-type: none"> ★ Read non-fiction books and try to remember key facts. ★ Look up the fun facts that you see in Atom question explanations. |
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Approach:

Follow these steps to help you choose the word that will complete the sentence:

1- Read through the information you have been given in the question.
- Always assume that all the statements you're given are **true** (even if they go against something you know!).

2- Then, read through the answer options carefully and start to **rule them out** one by one.
- Try to **prove** each answer option from the facts you have been given.
- You can't use your opinion: **opinions aren't facts!**
- If you **can't prove it**, then it **isn't** the answer you're looking for!

3- Once you think you've found the answer option that is **definitely true**, double-check it answers the question.

There are lots of different types of questions that might pop up. As long as you work through them carefully, statement by statement, you can't go wrong!

Let's see this in action!

I went to the zoo and I saw some lions, tigers, monkeys, giraffes, lemurs and bats.

Which of the following animals was not at the zoo when I visited?

- Lions
- Monkeys
- Lemurs
- Rhinos

We need to work like a detective and carefully check the answer options against the question statement. The animal that **does not appear** in the list is our answer!



Rhinos are the only animal NOT in the statement, and therefore the only animal out of our answer options that was not in the zoo!



Look out for...

- ★ Look out for **determiners** like 'some', 'all', 'a' and 'the'. These determiners will tell you who or what each statement is about.
- ★ For example, if the statement mentions **'all trees'**, we know that it is talking about every single tree (all the trees in the world!). But if it only mentions **'the tree'**, it's talking about a specific tree!
- ★ Look out for **adverbs** like 'sometimes', 'always', 'never', 'often' and 'usually'. These tell us about the certainty of a statement.
- ★ For example, the statement 'Tom **always** goes to the beach at weekends' is very different to 'Tom **sometimes** goes to the beach at weekends'.
- ★ In the first statement, we know that at some point in the weekend Tom will **definitely** go to the beach. But with the second statement, we know that Tom **might** go to the beach, but we can't be certain.



Let's take a look at different example...

Which of the statements about the images below is definitely true?



- A) They are all the same colour.
- B) Ball sports are fun.
- C) They are all types of balls.
- D) They are all being played with by two people.

We need to look at each answer statement and see if we can discount it based **only** on the pictures we can see!

A) They are all the same colour.

We can clearly see they are **different** colours.

B) Ball sports are fun.

This is an **opinion** (which you may or may not agree with), not a fact!

C) They are all types of balls.

Yes! There is a rugby ball, a beach ball, a tennis ball and a basketball!

D) They are all being played with by two people.

We do not **know** this information from the pictures. We only can see the different coloured and shaped balls.

Once we have ruled out the answers that we cannot prove, we are left with the statement that is definitely true: **C!**

Let's try one more!

Which statement is definitely true? Remember that you can only use the information provided.



Carrots are root vegetables.

Root vegetables grow in the ground.

- A) All carrots are orange.
- B) Carrots grow in the ground.
- C) Turnips grow in the ground.
- D) Carrots taste good.

First, we should read through the speech bubble. Then, we go through each answer statement one by one to work out if it is **definitely true** based on the information in the speech bubble.

A) All carrots are orange

You may **know** that carrots can be orange, but you are not told this in the statement! This might be true, but it's not **definitely true**.

B) Carrots grow in the ground.

We are told that 'carrots are root vegetables', and that 'root vegetables grow in the ground'. This means that carrots **definitely** grow in the ground!

C) Turnips grow in the ground.

Turnips are also a type of root vegetable. But we are not told this in the question. We cannot prove that this statement is true using **only** what we have been given.

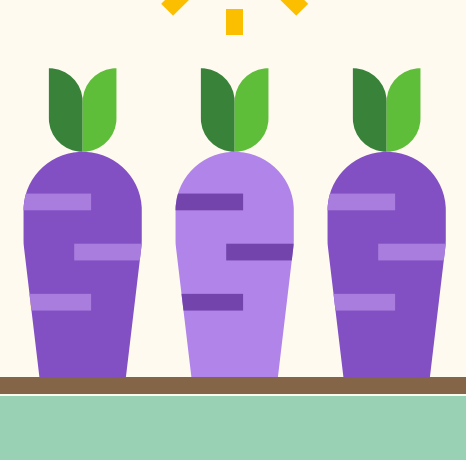
D) Carrots taste good.

This is an **opinion!** Opinions are not facts and **cannot be definitely true**.

We have ruled out the answers that we cannot prove, and we are left with the statement that is definitely true: **b!**

Fun fact!

- Carrots were originally **purple**.
- They have been bred into the orange variety we know today!



Tips!

- ★ Work through the answer statements **one by one** and try to rule them out!
- ★ **Rule out** wrong answers by fact-checking them against the question statements.
- ★ Forget anything you may **already know** and **only** concentrate on the information you're given!