

## Table of Contents

What This Book Teaches . . . . .	iii
Four Myths About Critical Thinking . . . . .	iv
Pretest . . . . .	v
1. What Is Critical Thinking? . . . . .	1
2. Decisions and Conclusions . . . . .	4
3. Beliefs and Claims . . . . .	8
4. Finding Evidence . . . . .	12
5. Evaluating Evidence . . . . .	18
6. Inferring and Inferences . . . . .	34
7. Facts and Opinions . . . . .	37
8. Facts and Probable Truths . . . . .	42
9. False and Probably False . . . . .	49
10. Facts, Probably True, or Probably False . . . . .	54
11. Venn Diagrams . . . . .	59
12. Logical Connectives . . . . .	62
13. Advertising . . . . .	76
14. Agreements and Contracts . . . . .	83
15. Common Errors in Reasoning . . . . .	88
16. Arguments . . . . .	95
17. Valid and Invalid Arguments . . . . .	105
18. Fallacies . . . . .	125
19. Analogy Arguments . . . . .	128
20. Using Critical Thinking to Make Better Decisions . . . . .	130
Posttest . . . . .	133
Answers . . . . .	134
Sample from <i>Practical Critical Thinking</i> . . . . .	145

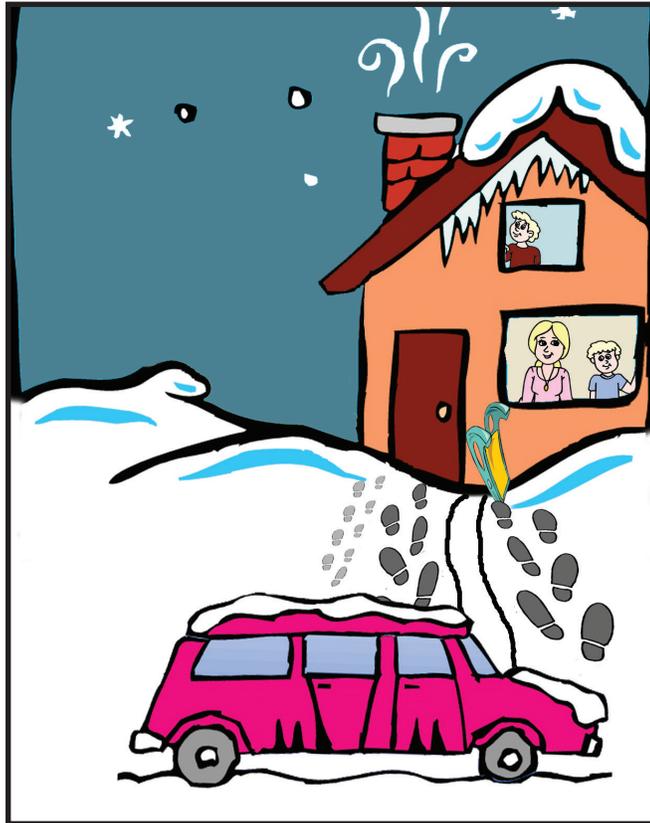
## About the Author

Michael Baker has been president of The Critical Thinking Co.™ for over 25 years. He majored in philosophy at the University of Michigan for six years. He has authored or coauthored several award-winning books and software products for The Critical Thinking Co.™

## The Cort House

Read the story and look for evidence in the picture to answer the questions below.

All four members of the Cort family just returned to their house after a three-day vacation visiting relatives. It started snowing last night, but stopped just before they got home. Mr. and Mrs. Cort bought a new sled on their way home and parked the car right in front of the house. All of the Cort family is in the house. The Cort family are the only people in the house. None of the Corts were carried into the house.



1. Which Cort is not in the picture?

\_\_\_\_\_

2. If you look at the tracks in the snow, how many people are in the house?

\_\_\_\_\_

3. If there are four members of the Cort family in the house, how could the fourth member of the family get into the house?

\_\_\_\_\_  
\_\_\_\_\_

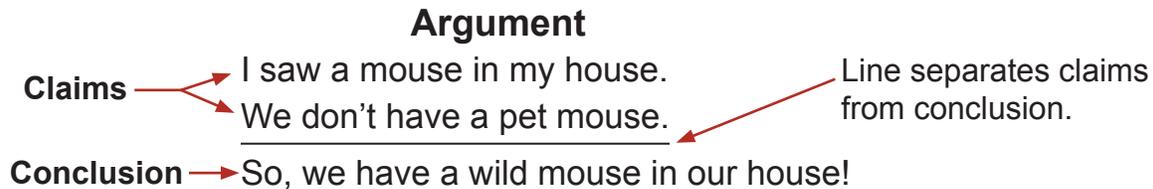
## 16

## Arguments

**What Is an Argument?**

An argument isn't always a heated discussion between two people. An argument can also be an attempt to persuade (convince) you that something is true.

Arguments meant to convince you to conclude something is true are made up of claims and a conclusion.

**Importance of Understanding an Argument's Claims and Conclusion**

If someone is trying convince you to believe something, then it is important to remember that it is their responsibility to make their claims and conclusion understandable. Look at the example below.



Tammy is playing disc catch at the beach with her friend Mai. Her dog, Lisa, is trying to steal the disc from Tammy and Mai. So, she won't catch the disc this time.

Who won't catch the disc this time? Which girl is Tammy and which is Mai? Is the conclusion about Tammy, Mai, or Tammy's dog, Lisa? We can't evaluate the argument if we don't fully understand the claim and the conclusion.

If you can't understand the claims or conclusion of someone's argument, then you cannot evaluate their argument. Never accept the conclusion of an argument you don't understand.

## Understanding Arguments Practice

Read each argument below. Accept that the claims and conclusion of each argument is true. Then decide if each statement is true, false, or unknown.



Karen and her teammates are playing a soccer match at Coos Bay Middle School. Karen's team has lost only two games in the last two years.

So, they will win the game.

1. Karen plays soccer on the Coos Bay Middle School soccer team.

True

False

Unknown

2. There is a soccer match being played in Coos Bay.

True

False

Unknown

3. Karen's team will win the game.

True

False

Unknown

## Trying to Win an Argument by Changing the Argument

Some people try to avoid a tough argument that they don't want to accept as true by changing the argument. There are two common ways to change an argument. One way is to change the argument into a weaker argument called a Straw Man Argument. The other way to change the argument is to change the subject of an argument by creating a Red Herring Argument.

### Straw Man Arguments

A Straw Man Argument is when someone tries to change the original argument into a much weaker argument. The new—much weaker—argument can then be proven false. A good way to remember a Straw Man Argument is to remember that it is easy to beat up a straw man. Let's look at a couple of examples.



Jason's argument to Tom:

#### **Original Argument**

You picked the last TV show that we watched.

So, I should choose the next TV show we watch.

Tom then changes Jason's argument into a Straw Man Argument by saying Jason's argument is ...

#### **Straw Man Argument**

Whenever we are watching TV

Jason should always pick what we watch next.

Tom has produced a Straw Man Argument of Jason's argument because he has turned Jason's argument into an argument that nearly everyone would find unreasonable. Whenever two people are watching TV, why should the same person always get to choose what they watch?

Teaching Note: The three methods taught in this section (Straw Man Arguments, Red Herring Arguments, and Begging the Question) are considered fallacies. Since they are most commonly conscious attempts to win an argument, they are presented here separately from the other fallacies taught in the section on fallacies.

## Straw Man Practice

Circle “Yes” if Argument B is a Straw Man Argument and “No” if it is not.

### 1. Argument A

If we are on a busy street without a traffic light, then we should not cross the street.

This is a busy street without a traffic light.

So, we should not cross the street.

### Argument B

Whenever we are on a street without a traffic light, then we should not cross the street.

This is a street without a traffic light.

So, we should not cross the street.

Straw Man:            Yes            No

### 2. Argument A

If a new person moves into our neighborhood, Susan is always mean to the person.

Teresa just moved into our neighborhood.

So, Susan will be mean to Teresa.

### Argument B

Whenever a new person moves to our neighborhood, Susan will be mean to him or her.

Teresa just moved here from another neighborhood.

So, Susan is going to be mean to her.

Straw Man:            Yes            No

### 3. Argument A

If Nancy is on our spelling team, we will have a good chance to beat all the other teams in the state.

Nancy is on our spelling team.

So, we will have a good chance to beat all the other teams in the state.

### Argument B

If Nancy is on our spelling team, we will never lose to the other teams in the state.

Nancy is on our spelling team.

So, we will never lose to the other teams in the state.

Straw Man:            Yes            No