

# Homework 1

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**Problem 1.** *What is the definition of an argument (the definition used in this course, that is)?*

**Problem 2.** *Is the following an argument?*

1. *It is raining.*
2. *If it is raining then there are clouds in the sky.*
3. *My stomach hurts?*

**Problem 3.** *Is the following an argument?*

1. *It is raining.*
2. *If it is raining then apples are orange.*
3. *The sky is red.*

**Problem 4.** *Is the following argument valid?*

1. *It is raining.*
2. *There are clouds in the sky.*
3. *It is raining and there are clouds in the sky.*

**Problem 5.** *Is the following argument valid?*

1. *It is not raining.*
2. *If it is raining then there are clouds in the sky.*
3. *There are no clouds in the sky.*

**Problem 6.** *Is the following argument valid?*

1. *Addie did not attend the funeral.*
2. *Either Addie attended the funeral or Anse did.*

3. Anse attended the funeral.

**Problem 7.** *Is the following argument valid?*

1. *If fish live in the Atlantic, then you should go to the store.*
2. *You should not go to the store.*
3. *Fish live in the Atlantic.*

**Problem 8.** *Give an example of a valid argument. Your example must be different from (i) the valid arguments mentioned in this homework, and (ii) the examples of valid arguments given on handouts.*

**Problem 9.** *What is a reasonable characterization of soundness for natural language arguments?*

**Problem 10.** *Is the following argument sound? Why or why not?*

1. *Grass is not purple.*
2. *If alligators are reptiles, then alligators are not mammals.*
3. *Alligators are not mammals.*

**Problem 11.** *Is the following argument sound? Why or why not?*

1. *Grass is not red.*
2. *If grass is not red, then grass is not scarlet.*
3. *Grass is not scarlet.*

**Problem 12.** *Is the following argument sound? Why or why not?*

1. *If Zora Neale Hurston grew up in Spain, then she was Spanish.*
2. *Zora Neale Hurston was not Spanish.*
3. *Zora Neale Hurston did not grow up in Spain.*