Inductive Arguments:
Day 3
Inductive Arguments: 3. Arguments from Analogy

What do these statements have in common?

- “Her mom is really nice. I’ll bet her dad is, too!”
- “I passed P.E without studying. So I’ll be okay if I don’t study for Phil 004.”

“X is like Y. So, what’s true for X is true for Y.”
(Where X & Y are the terms of the analogy.)
Inductive Arguments:  
3. Arguments from Analogy

How can we evaluate the strength of an argument from analogy?

• “I passed P.E without studying. So I’ll be okay if I don’t study for Phil 004.”

The more similar the “terms of the analogy” are, the stronger the argument.

Safer to stick with modest confidence levels:

“I passed P.E without studying. So there’s a chance I’ll be okay if I don’t study for Phil 004.”
Inductive Arguments: 3. Arguments from Analogy

“*She’s terrible at tennis, so I doubt she’d be great at racquetball.*”

**Terms:**

Her ability in tennis/her ability in racquetball

**Confidence Level Indicator:**

“I doubt she’d be great.”

**What’s a similarity between the terms?**

Lots can be said here...

**Good Argument?**

Not a perfect analogy, but the confidence level seems right.
Inductive Arguments:  
3. Arguments from Analogy

“That guy will make an AWFUL dog owner. Just look at how he treats his kids!”

Terms:
kids / dogs

Confidence Level Indicator:
“will”

What’s a similarity between the terms?
Lots can be said here...

Good Argument?
Both experience pain. It’s reasonable, but confidence indicator is a bit high.
Inductive Arguments:  
3. Arguments from Analogy

“Warren takes good care of his personal appearance. Let’s ask him to house sit for us while we are in Europe.”

Terms:
Warren’s treatment of his appearance and his treatment of their house.

Confidence Level Indicator:
Pretty high since no indicator mentioned.

What’s a similarity between the terms?
Lots can be said here...

Good Argument?
No. Terms not very similar.
Inductive Arguments:
3. Arguments from Analogy

“Lysol kills germs, so it might make a great deodorant.”

Terms:
Lysol’s ability to kill germs & Lysol’s ability as a deodorant.

Confidence Level Indicator:
“It might make” is relatively cautious.

What’s a similarity between the terms?
Lots can be said here...

Good Argument?

Doesn’t matter how cautious the indicator is in this case. Analogy is just not strong enough.
Inductive Arguments: Beware of Fallacies

Fallacy #1: Hasty Generalizing or Arguing from Anecdote
- If sample is TOO SMALL for the implied confidence level / margin of error. Can lead to STEREOTYPING.

Fallacy #2: Unclear Generalizing
- If sample, target population, or feature is unclear.

Fallacy #3: Biased Generalizing
- If larger sample size doesn’t strengthen a claim because the sample is not representative of the population.
What type of inductive argument is this?

“Costco charges less than Walmart for comparable items. I’ve shopped there for years.”

a. Inductive syllogism
b. Inductive generalization
c. Inductive analogy
What type of inductive argument is this?

“Yamaha makes great motorcycles. I’ll bet their pianos are pretty good, too.”

a. Inductive syllogism
b. Inductive generalization
c. Inductive analogy
Review – Ch. 10

What type of inductive argument is this?

“Alvid likes the president; after all, he’s a Democrat.”

a. Inductive syllogism
b. Inductive generalization
c. Inductive analogy

BTW: What’s the unstated premise?
“Most Democrats like the president.”
What is the **sample** in the following inductive argument?

“The young people around here sure are crazy! Did you see those two dudes drag racing?”

a. Young people around here
b. Being crazy
c. Two dudes drag racing
d. Drag racing
e. Sure are
What is the population in the following inductive argument?

“What the young people around here sure are crazy! Did you see those two dudes drag racing?”

a. Young people around here
b. Being crazy
c. Those two dudes
d. Drag racing
e. Sure are
What is the feature in the following inductive argument?

“The young people around here sure are crazy! Did you see those two dudes drag racing?”

a. Young people around here
b. Being crazy
b. Those two dudes
d. Drag racing
e. Sure are
Julia sells exotic birds. She has placed four orders with wholesale bird supplier Papagayo Co., and all of them have been filled with healthy birds. Lately, however, some wholesale competitors have been trying to get her to order from them. But, when it’s time to make the next order, she decides she’s better off with Papagayo because she’s pretty sure she’ll get healthy birds. (Do not assume that you know anything about birds or the bird business.)

If Julia had placed seven orders with Papagayo with the same result, her argument would be ______________.

a. Stronger  

b. Weaker  

c. No change  

d. Weaker and stronger at the same time
Julia sells exotic birds. She has placed four orders with wholesale bird supplier Papagayo Co., and all of them have been filled with healthy birds. Lately, however, some wholesale competitors have been trying to get her to order from them. But, when it’s time to make the next order, she decides she’s better off with Papagayo because she’s pretty sure she’ll get healthy birds. (Do not assume that you know anything about birds or the bird business.)

If all the preceding orders had been for parrots, then her argument would be stronger if the new order was for____.

a. both parrots and macaws.

b. just parrots.

c. just macaws

d. Bird seeds
Julia sells exotic birds. She has placed four orders with wholesale bird supplier Papagayo Co., and all of them have been filled with healthy birds. Lately, however, some wholesale competitors have been trying to get her to order from them. But, when it’s time to make the next order, she decides she’s better off with Papagayo because she’s pretty sure she’ll get healthy birds. (Do not assume that you know anything about birds or the bird business.)

If we don’t know what kind of bird she’s about to order, we have the strongest argument if the previous orders were ____.

a. both parrots and macaws.

b. just parrots.

c. just macaws

d. Bird seeds
Julia sells exotic birds. She has placed four orders with wholesale bird supplier Papagayo Co., and all of them have been filled with healthy birds. Lately, however, some wholesale competitors have been trying to get her to order from them. But, when it’s time to make the next order, she decides she’s better off with Papagayo because she’s pretty sure she’ll get healthy birds. (Do not assume that you know anything about birds or the bird business.)

The feature here is ____________.

a. Four orders.
b. Being healthy bids.  
c. All future orders.
d. Papagayo Co.
If I wear my lucky sweater at the bar tonight I’m pretty sure I’ll get phone numbers from around 2 cute people. I’ve worn my lucky sweater 10 times while out at a bar and every night I’ve worn it, I’ve always been able to get phone numbers from at least 3 cute people.

What is the sample size?

a. 10
b. 3
c. 2
d. 0
If I wear my lucky sweater at the bar tonight I’m pretty sure I’ll get phone numbers from around 2 cute people. I’ve worn my lucky sweater 10 times while out at a bar and every night I’ve worn it, I’ve always been able to get phone numbers from at least 3 cute people.

What is the confidence level indicator of the conclusion of the argument?

a. Every
b. Always
c. Pretty sure
   -
d. Around
If I wear my lucky sweater at the bar tonight I’m pretty sure I’ll get phone numbers from around 2 cute people. I’ve worn my lucky sweater 10 times while out at a bar and every night I’ve worn it, I’ve always been able to get phone numbers from at least 3 cute people.

Which of the following is the margin of error indicator in the conclusion of the argument?

a. Every
b. Always
c. Pretty sure
d. Around
Playing a viola is just like playing a violin. You need to have strong, quick fingers. Angus is pretty good on the violin; he’d probably be good on the viola too.

Which of the following is a term of the analogy?

a. You need to have strong, quick fingers.
b. Angus is good at it.
c. Playing a viola.
d. Playing a viola is like playing a violin.
Review – Ch. 10

Playing a viola is just like playing a violin. You need to have strong, quick fingers. Angus is pretty good on the violin; he’d probably be good on the viola too.

Which of the following is a similarity between the terms of the analogy?

a. You need to have strong, quick fingers.
b. Angus is good at it.
c. Playing a violin.
d. Playing a viola is like playing a violin.
Playing a viola is just like playing a violin. You need to have strong, quick fingers. Angus is pretty good on the violin; he’d probably be good on the viola too.

Which of the following is the feature of the analogy?

a. You need to have strong, quick fingers.

b. Angus is good at it.

c. Playing a violin.

d. Playing a viola is like playing a violin.
Which is the best translation for this claim: “Salt is a meat preservative.”

a. All salts are things that preserve meat.
b. All things that preserve meat are salts.
c. Some salts are things that preserve meat.
d. Some things that preserve meat are salts.
Review – Ch. 8

Which is the best translation for this claim: “Nobody arrived except the cheerleaders.”

a. All cheerleaders are people that arrived.
b. Some people that arrived are cheerleaders.
c. No people that arrived are cheerleaders.
d. All people that arrived are cheerleaders.
Review – Ch. 8

Which is the best translation for this claim: “If you live in the dorms, you can’t own a car.”

a. Some people who live in dorms are people who can own a car.

b. No people who live in the dorms are people who can own a car.

c. Some people who can own a car are not people who live in the dorms.

d. All people who can own a car are people who live in the dorms.
All B are C
No C are D
No, B are D.

Which rule (if any) are broken in this argument?

a. Breaks rule 1 only
b. Breaks rule 2 only
c. Breaks rule 3 only
d. Breaks more than one rule
e. Breaks no rule.
All B are C
No C are D
No, B are D.

Which diagram represents the premises of this argument?
Some C are not D
All C are A
Some D are A

Which rule (if any) are broken in this argument?

a. Breaks rule 1 only
b. Breaks rule 2 only
c. Breaks rule 3 only
d. Breaks more than one rule
e. Breaks no rule.
Some C are not D
All C are A
Some D are A

What is the middle term?

a. C
b. D
c. A
d. Some
e. All
Some A are C
Some C are B.
Some A are B.

Which rule (if any) are broken in this argument?

a. Breaks rule 1 only
b. Breaks rule 2 only

Which rule (if any) are broken in this argument?

c. Breaks rule 3 only
d. Breaks more than one rule
e. Breaks no rule.
Some A are C
Some C are B.
Some A are B.

Which diagram depicts the premises of this argument?