

# Knowledge Check: Introduction to Logic Reasoning

TOTAL POINTS 4

1. Consider this list of statements from a Lewis Carroll Puzzle.

1 / 1 point

*(a) No interesting poems are unpopular among people of real taste.*

*(b) No modern poetry is free from affectation.*

*(c) All your poems are on the subject of soap-bubbles.*

*(d) No affected poetry is popular among people of real taste.*

*(e) No ancient poem is on the subject of soap-bubbles.*

Also consider this list of symbols that represent specific parts of the statements.

*I : it is interesting*

*P : it is popular among people of real taste*

*M : it is modern*

*A : it is affected*

*Y : it is your poem*

*S : it is on the subject of soap bubbles*

Using this information, which symbolic implication represents the statement (d)?

☐  $M \rightarrow A$

☐  $\neg M \rightarrow \neg S$

☒  $A \rightarrow \neg P$

☐  $P \rightarrow A$



Correct

Correct! This expression correctly represents the statement (d) because the A implies the affected poems and the  $\neg P$  represents that they are not popular among people of real taste.

2. Consider this list of statements from a Lewis Carroll Puzzle.

1 / 1 point

*(a) No interesting poems are unpopular among people of real taste.\**

*(b) No modern poetry is free from affectation.*

*(c) All your poems are on the subject of soap-bubbles.*

*(d) No affected poetry is popular among people of real taste.*

*(e) No ancient poem is on the subject of soap-bubbles.*

Also consider this list of symbols that represent specific parts of the statements.

*I : it is interesting*

*P : it is popular among people of real taste*

*M : it is modern*

*A : it is affected*

*Y : it is your poem*

*S : it is on the subject of soap bubbles*

Using this information, which symbolic implication represents the statement (c)?

☐  $P \rightarrow A$

☐  $M \rightarrow A$

☐  $\neg M \rightarrow \neg S$

☒  $Y \rightarrow S$



Correct

Correct! This expression correctly represents the statement (c) because the Y implies all of your poems and the S represents the subject of soap bubbles.

3. Consider these statements from a Lewis Carroll Puzzle.

1 / 1 point

*(a) No kitten, that loves fish, is unteachable.*

*(b) No kitten without a tail will play with a gorilla.*

*(c) Kittens with whiskers always love fish.*

*(d) No teachable kitten has green eyes.*

*(e) No kittens have tails unless they have whiskers.*

What conclusion can be correctly deduced from these statements?

- ☐ Kittens that are teachable do not love fish.
- ☐ Kittens that love fish have green eyes.
- ☒ Kittens that have whiskers are teachable.
- ☐ Kittens that are teachable do not have tails.



Correct

Correct! This can be correctly deduced from statements (a) and (c), which suggest that kittens that love fish are teachable, and that kittens that have whiskers always love fish.

4. Consider these statements from a Lewis Carroll Puzzle.

*(a) No kitten, that loves fish, is unteachable.*

*(b) No kitten without a tail will play with a gorilla.*

*(c) Kittens with whiskers always love fish.*

*(d) No teachable kitten has green eyes.*

**(e) *No kittens have tails unless they have whiskers.***

**What conclusion can be correctly deduced from these statements?**

- ☐ Kittens that are teachable do not have tails.
- ☐ Kittens that do not have whiskers play with a gorilla.
- ☐ Kittens that love fish have green eyes.
- ☒ A kitten that plays with a gorilla is teachable.



**Correct**

Correct! This can be correctly deduced from statements (a), (b), (c) and (e), which suggest that kittens that love fish are teachable, kittens that play with a gorilla have tails, kittens that have whiskers always love fish, and that kittens that have tails also have whiskers.