

PREMISE & CONCLUSION INDICATORS

INSTRUCTIONS: Let the letters "P" stand for a premise/reason, and "C" for a conclusion. Insert these letters in the appropriate positions. For example, the correct insertion of these letters in "___ therefore, ___" is "P therefore C". Since "therefore" introduces a conclusion, it is a conclusion indicator. The correct insertion of "P" and "C" in "Since ___, ___" is "Since P, C". As "since" introduces a premise, it is a premise indicator. If there is an expression that we typically do not use a premise or a conclusion indicator, then do NOT insert any letter. Notice that in some cases some insertions would require some grammatical changes.

EXERCISE A

- | | |
|---|---|
| 1) ___, consequently, ___. | 2) ___ entails that ___. |
| 3) As shown by the fact that ___, ___. | 4) ___. This ¹ is shown by ___. |
| 5) As ___, ___. | 6) ___ shows that ___. |
| 7) ___. From this we can deduce that ___. | 8) ___. However, ___. |
| 9) ___. Accordingly, ___. | 10) ___. I conclude that ___. |
| 11) ___. From this it follows that ___. | 12) ___ follows from ___. |
| 13) ___. Moreover, ___. | 14) ___. That is proven from ___. |
| 15) ___. This proves that ___. | 16) Granted that ___, ___. |
| 17) ___. Furthermore, ___. | 18) Supposing that ___, ___. |
| 19) ___. Hence, ___. | 20) ___. For ___. |
| 21) ___. Then ___. [find exceptions] | 22) ___ because ___. [arg/expl] |
| 23) Because ___, ___. [arguments/explanations] | 24) ___. Nevertheless ___. |
| 25) ___. That is why ___. | 26) This is why ___, ___. |
| 27) ___. Here is why, ___. | 28) Here is why ___, ___. |
| 29) ___. Obviously ___. | 30) ___. This being so, ___. |
| 31) ___ implies that ___. | 32) As indicated by ___, ___. |
| 33) ___ due to the reason that ___. | 34) On account of the reason that ___, ___. |
| 35) Despite the fact that ___, ___. | 36) ___. In view of that, ___. |
| 37) In view of the fact that ___, ___. | 38) ___. In addition, ___. |
| 39) ___ may be deduced from ___. | 40) ___. One can deduce that ___. |
| 41) ___ may be inferred from ___. | 42) ___. One may infer that ___. |
| 43) ___. Also ___. | 44) ___, thereby showing that ___. |
| 45) ___, thus, ___. [Identify exceptions] | 46) ___. Still, ___. |
| 47) It can be derived from ___ that ___. | 48) ___. That is derived from ___. |
| 49) ___. This bears out the point that ___. | 50) ___. Besides, ___. |
| 51) ___ establishes that ___. | 52) ___ justifies that ___. |
| 53) ___ proves that ___. | 54) ___. Its proof is that ___. |
| 55) ___. This is proven from ___. | 56) ___. Finally, ___. |
| 57) ___ supports that ___. | 58) ___ is supported by ___. |
| 59) In support of ___, consider ___. | 60) ___ lends credence to ___. |
| 61) ___. Evidently, ___. | 62) ___ leads me to believe that ___. |
| 63) Inasmuch as ___, ___. | 64) ___. As a result, ___. |
| 65) On the hypothesis that ___, ___. | 66) ___ demonstrates that ___. |
| 67) ___ indicates that ___. | 68) ___ signifies that ___. |
| 69) ___ guarantees that ___. | 70) ___ is based on ___. |
| 71) On the basis of ___, ___. | 72) ___. In that case, ___. |
| 73) In light of the fact that ___, ___. | 74) Even if ___, ___. |
| 75) ___. You just need to consider that ___. | 76) ___. But that comes down to ___. |
| 77) ___. That makes me believe that ___. | 78) ___. To say that is to say ___. |
| 79) ___. In conclusion, ___. [find exceptions.] | 80) ___. This comes from ___. |
| 81) ___. That authorizes me to say that ___. | 82) I'm convinced from ___, that ___. |
| 83) ___. This marshals in favor of ___. | 84) ___. For this reason, ___. |

¹ Impersonal pronouns sometimes refer to earlier statements.

85) _____. On this account, _____.

86) Seeing that _____, _____.

Identify or invent three other premise indicators.

Identify or invent three other conclusion indicators.

What do you do when you are not sure whether an expression is used as either a premise or conclusion indicator? Here is an illustration of a procedure to follow:

Suppose you have read or heard a few times “accordingly” used by competent writers or speaker, but you are not sure of its use to identify the argumentative function of statements. Then compare the following sentences:

(a) Accordingly it is raining, it is cloudy.

(b) It is raining, accordingly, it is cloudy.

Sentence (b) sounds right. Since you already know that “it is cloudy” is the conclusion, “accordingly” functions as a conclusion indicator.

Here is a general description of the procedure:

1. Apply the expression to a simple argument whose conclusion and premise are *obvious to you*. For example, in "(1)< It's raining>, (2)<It's cloudy>", statement (1) is evidently the premise for conclusion (2).

2. Insert the expression in the two different spots

(a) _____ it is raining, it is cloudy, and

(b) It is raining, _____ it is cloudy.

3. In which case does the insertion make more sense, or sound most reasonable, or feel most right? If it is (a), then the expression functions as premise indicator, BECAUSE you already know that “it is raining” is the premise here. If it is (b), then the expression functions as a conclusion indicator, FOR you already know that “it is cloudy” functions as a conclusion here..

Note that this procedure is not reliable if the expression is totally new to you. In such cases, use this method with your dictionary.

INSTRUCTIONS: (a) Number the statements *consecutively*. (b) Circle conclusion indicators. (i) 1 (ii) 2
 (c) Box in premise indicators. (d) Diagram the reasoning: since we go FROM premise(s) TO a conclusion, diagram (i) means that statement (1) is the premise of conclusion (2): the arrow always points to the conclusion; diagram (ii) means that statement (2) is a premise and (1) its conclusion.

EXAMPLE: 1. (1)<S/He's the greatest professional athlete> because of (2)<his/her many accolades throughout his career>. *Diagram (ii)*

EXERCISE B

2. College campuses should be safe for all students. Therefore, binge drinking should not be part of campus life.
3. Since the protective ingredients of sunscreen lotion require several minutes to be absorbed, it should be applied approximately 30 minutes prior to one's exposure to the sun.
4. S/he received only A's this semester. Consequently, s/he will be on the dean's list.
5. You are an eighteen years old student. I infer this from the fact that you are in your second year of college.
6. This is art. I infer that personal taste comes into play.
7. I'm not making enough money to pay off my car, that is why I need to get a less expensive car.
8. The pills are totally natural, accordingly, they are totally safe.
9. Given that you do not have a parking pass, you may not part in the employee parking lot.
10. Inasmuch as homosexuals have the ability to care for children the same as heterosexuals, they should be able to adopt children.
11. I can run a mile each day. It follows that I am in better shape than the average person.
12. Most people who are famous have chosen to be famous, thus they should accept the consequences of their fame.
13. As water is involved in all vital processes in the body, it's the nutrient of greatest concern for the physically active individual.
14. Almost all talk therapies utilize Freudian concepts, whether they acknowledge it or not. Hence, common elements can be found in seemingly diverse therapies.
15. I have seen many times how marijuana and other narcotics can relieve the suffering of those in significant pain. In the light of this fact, narcotics should be made available to all those in pain.
16. When two odd numbers are multiplied together, the product is odd; for that reason the set of odd numbers is closed under multiplication.
17. Closure is a useful idea. For if we are multiplying two (or more) odd numbers and the product we calculate is even, we can conclude that our product is incorrect.

INSTRUCTIONS: The numbers stand for statements. Use the premise and conclusion indicators to diagram the inferences. Example: “Because (1), (2)” uses the premise indicator, “because”, which introduces a premise, and so the diagram (i.e., the map of the reasoning) is:

EXERCISE C

1. (1) because of (2).

3. Since (1), (2).

5. (1) for the reason that (2).

7. (1) is due to the fact that (2).

9. (1) is indicated by (2).

11. (1) indicates that (2).

13. (1) is made likely by (2).

15. (1) makes (2) likely.

17. (1) is proven by (2).

19. (1) proves (2).

21. (1) shows that (2).

23. (1) is shown to be true by (2).

25. (1) may be derived from (2).

27. (1) may be inferred from (2).

29. From (1) I infer that (2).

31. (1), as demonstrated by (2).

33. (1) demonstrates that (2).

35. (1), which is the consequence of (2).

37. (1), consequently (2).

39. (1) which is shown by (2).

41. (1), which shows that (2).

2. (1) entails that (2).

4. (1) is entailed by (2).

6. (1) follows from (2).

8. It follows from (1) that (2).

10. (1) for the reason that (2).

12. From (1) I conclude that (2).

14. (1). This indicates that (2).

16. One can deduce from (1), that (2).

18. (1) is deduced from (2).

20. (1) supports that (2).

22. (1) is supported by (2).

24. (1) implies that (2).

26. (1) is established by (2).

28. (1) is based on (2).

30. (1) is the basis of (2).

32. (1) guarantees that (2).

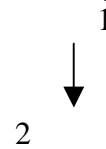
34. (1) This means that (2).

36. (1). This signifies that (2).

38. (1). This is the reason why (2).

40. (1). This is the reason why, (2).

42. The reason why (1), is that (2).



ANSWERS A

- 1) P, consequently, C.
- 3) As shown by the fact that P, C.
- 5) As P, C.
- 7) P. From this we can deduce that C.
- 9) P. Accordingly, C.
- 11) P. From this it follows that C.
- 13) ____. Moreover, ____. [CONJUNCTION, like “and”]
- 15) P. This proves that C.
- 17) ____. Furthermore, ____. [CONJUNCTION, like “and”]
- 19) P. Hence, C.
- 21) P. Then C. [find exceptions]
- 23) Because P, C. [arguments/explanations]
- 25) P. That is why C.
- 27) C. Here is why, P.
- 29) P. Obviously C. [CAREFUL: lots of exceptions.]
- 31) P implies that C.
- 33) C due to the reason that P.
- 35) Despite the fact that ____, ____. [DISCOUNT EXPR.]
- 37) In view of the fact that P, C.
- 39) C may be deduced from P.
- 41) C may be inferred from P.
- 43) ____. Also ____. [CONJUNCTION, like “and”]
- 45) P, thus, C. [Identify exceptions]
- 47) It can be derived from P that C.
- 49) P. This bears out the point that C.
- 51) P establishes that C.
- 53) P proves that C.
- 55) C. This is proven from P.
- 57) P supports that C.
- 59) In support of C, consider P.
- 61) P. Evidently, C. [CAREFUL: lots of exceptions.]
- 63) Inasmuch as P, C.
- 65) On the hypothesis that P, C.
- 67) P indicates that C.
- 69) P guarantees that C.
- 71) On the basis of P, C.
- 73) In light of the fact that P, C.
- 75) C. You just need to consider that P.
- 77) P. That makes me believe that C.
- 79) P. In conclusion, C. [find exceptions.]
- 81) P. That authorizes me to say that C.
- 83) P. This marshals in favor of C.
- 85) P. On this account, C.
- 2) P entails that C.
- 4) C. This is shown by P.
- 6) P shows that C.
- 8) ____. However, ____. [DISCOUNT EXPRESSION]
- 10) P. I conclude that C.
- 12) C follows from P.
- 14) C. That is proven from P.
- 16) Granted that P, C.
- 18) Supposing that P, C.
- 20) C. For P. [Careful, “for” has many other functions.]
- 22) C because P. [Used in both arguments & explanations.]
- 24) ____. Nevertheless ____. [DISCOUNT EXPRESSION]
- 26) This is why C, P.
- 28) Here is why C, P.
- 30) P. This being so, C.
- 32) As indicated by P, C.
- 34) On account of the reason that P, C.
- 36) P. In view of that, C.
- 38) ____. In addition, ____. [CONJUNCTION, like “and”]
- 40) P. One can deduce that C.
- 42) P. One may infer that C.
- 44) P, thereby showing that C.
- 46) ____. Still, ____. [DISCOUNT EXPRESSION]
- 48) C. That is derived from C.
- 50) ____. Besides, ____. [CONJUNCTION, like “and”]
- 52) P justifies that C.
- 54) C. Its proof is that P.
- 56) ____. Finally, ____. [CONJUNCTION, like “and”]
- 58) C is supported by P.
- 60) P lends credence to C.
- 62) P leads me to believe that C.
- 64) P. As a result, C.
- 66) P demonstrates that C.
- 68) P signifies that C.
- 70) C is based on P.
- 72) P. In that case, C.
- 74) Even if ____, ____. [DISCOUNT EXPRESSION]
- 76) P. But that comes down to C.
- 78) P. To say that is to say C.
- 80) C. This comes from P.
- 82) I'm convinced from P, that C.
- 84) P. For this reason, C.
- 86) Seeing that P, C.

ANSWERS B

I will insert **(PI)** after premise indicators, and **(CI)** after conclusion indicators.

In order to have you save paper, I will diagram the reasoning with sideways arrows. So, if you see $1 \rightarrow a2$, that means that (1) functions as a reason/premise for conclusion (2), and the “a” means that it is an argument. If you see $1 \rightarrow e2$, that means that (1) functions as a reason for conclusion (2), and the “e” means that it is an explanation.

2. (1)<College campuses should be safe for all students>. Therefore(CI), (2)<binge drinking should not be part of campus life>. $1 \rightarrow a2$

3. Since (1)<the protective ingredients of sunscreen lotion require several minutes to be absorbed>, (2)<it should be applied approximately 30 minutes prior to one’s exposure to the sun>. $1 \rightarrow a2$

4. (1)<S/he received only A’s this semester>. Consequently(CI), (2)<s/he will be on the dean’s list>. $1 \rightarrow a2$ This is a prediction. If the reasoning had been, (1)<S/he received only A’s this semester>. Consequently, (2)<s/he will be on the dean’s list>, then the diagram would have been $1 \rightarrow e2$.

5. (1)<You are an eighteen years old student>. I infer(CI) this from the fact that(PI) (2)<you are in your second year of college>. In “I infer this”, the “this” is an impersonal pronoun standing for claim (1). $2 \rightarrow a1$

6. (1)<This is art>. I infer that(CI) (2)<personal taste comes into play>. $1 \rightarrow a2$

7. (1)<I’m not making enough money to pay off my car>, that is why(CI) (2)<I need to get a less expensive car>. $1 \rightarrow a2$

8. (1)<The pills are totally natural>, accordingly(CI), (2)<they are totally safe>. $1 \rightarrow a2$

9. Given that(PI) (1)<you do not have a parking pass>, (2)<you may not part in the employee parking lot>. $1 \rightarrow a2$

10. Inasmuch as(PI) (1)<homosexuals have the ability to care for children the same as heterosexuals>, (2)<they should be able to adopt children>. $1 \rightarrow a2$

11. (1)<I can run a mile each day>. It follows that(CI) (2)<I am in better shape than the average person>. $1 \rightarrow a2$

12. (1)<Most people who are famous have chosen to be famous>, thus(CI) (2)<they should accept the consequences of their fame>. $1 \rightarrow a2$

13. As(PI) (1)<water is involved in all vital processes in the body>, (2)<it’s the nutrient of greatest concern for the physically active individual>. $1 \rightarrow a2$

14. (1)<Almost all talk therapies utilize Freudian concepts>, whether they acknowledge it or not. Hence(CI), (2)<common elements can be found in seemingly diverse therapies>. $1 \rightarrow a2$ Note that “whether they acknowledge it or not” is an aside, it is not part of (1).

15. (1)<I have seen many times how marijuana [relieve the suffering of those in significant pain]> and (2)<[I have seen many times how] other narcotics can relieve the suffering of those in significant pain>. In the light of this fact(CI), (3)<narcotics should be made available to all those in pain>. $(1 \& 2) \rightarrow a3$ In this example I have simply made explicit in square brackets what is left implicit.

16. (1)<When two odd numbers are multiplied together, the product is odd>; for that reason(CI) (2)<the set of odd numbers is closed under multiplication>. $1 \rightarrow a2$ In this example, statement (1) is a conditional statement. NEVER break up a conditional statement into its propositions, for those propositions are not asserted. Review the worksheet on Sentences, Propostions, Statements.

17. (1)<Closure is a useful idea>. For(PI) (2)<if we are multiplying two (or more) odd numbers and the product we calculate is even, we can conclude that our product is incorrect>. $2 \rightarrow a1$ In this example, statement (1) is a conditional

statement, and “conclude that” in (1) functions like “then” in a regular conditional statement. Do NOT respond automatically to these words: examine how they are used in their context.

ANSWERS C

In order to help you save paper, I will draw the arrows sideways.

1. (1) because of (2). $2 \rightarrow 1$
2. (1) entails that (2). $1 \rightarrow 2$
3. Since (1), (2). $1 \rightarrow 2$
4. (1) is entailed by (2). $2 \rightarrow 1$
5. (1) for the reason that (2). $2 \rightarrow 1$
6. (1) follows from (2). $2 \rightarrow 1$
7. (1) is due to the fact that (2). $2 \rightarrow 1$
8. It follows from (1) that (2). $1 \rightarrow 2$
9. (1) is indicated by (2). $2 \rightarrow 1$
10. (1) for the reason that (2). $2 \rightarrow 1$
11. (1) indicates that (2). $1 \rightarrow 2$
12. From (1) I conclude that (2). $1 \rightarrow 2$
13. (1) is made likely by (2). $2 \rightarrow 1$
14. (1). This indicates that (2). $1 \rightarrow 2$
15. (1) makes (2) likely. $1 \rightarrow 2$
16. One can deduce from (1), that (2). $1 \rightarrow 2$
17. (1) is proven by (2). $2 \rightarrow 1$
18. (1) is deduced from (2). $2 \rightarrow 1$
19. (1) proves (2). $1 \rightarrow 2$
20. (1) supports that (2). $1 \rightarrow 2$
21. (1) shows that (2). $1 \rightarrow 2$
22. (1) is supported by (2). $2 \rightarrow 1$
23. (1) is shown to be true by (2). $2 \rightarrow 1$
24. (1) implies that (2). $1 \rightarrow 2$
25. (1) may be derived from (2). $2 \rightarrow 1$
26. (1) is established by (2). $2 \rightarrow 1$
27. (1) may be inferred from (2). $2 \rightarrow 1$
28. (1) is based on (2). $2 \rightarrow 1$
29. From (1) I infer that (2). $1 \rightarrow 2$
30. (1) is the basis of/for (2). $1 \rightarrow 2$
31. (1), as demonstrated by (2). $2 \rightarrow 1$
32. (1) guarantees that (2). $1 \rightarrow 2$
33. (1) demonstrates that (2). $1 \rightarrow 2$
34. (1) This means that (2). $1 \rightarrow 2$
35. (1), which is the consequence of (2). $2 \rightarrow 1$
36. (1). This signifies that (2). $1 \rightarrow 2$
37. (1), consequently (2). $1 \rightarrow 2$
38. (1). This is the reason why (2). $1 \rightarrow 2$
39. (1) which is shown by (2). $2 \rightarrow 1$
40. (1). This is the reason why, (2). $2 \rightarrow 1$
[Pay close attention to punctuation.]
41. (1), which shows that (2). $1 \rightarrow 2$
42. The reason why (1), is that (2). $2 \rightarrow 1$