

Identify the forms of the arguments in Problems 36–45. Those without a specific name are invalid.

36. Mr. Jones intends to buy either a Ford or a Chevrolet. But he doesn't intend to buy a Ford. Therefore, he intends to buy a Chevrolet.
- Disjunctive syllogism
 - Modus ponens
 - Modus tollens
 - Invalid
 - Denying the antecedent
37. If there's a prowler in the yard, then the dog is barking. Since the dog is barking we may conclude there's a prowler in the yard.
- Pure hypothetical syllogism
 - Modus ponens
 - Denying the antecedent
 - Modus tollens
 - Affirming the consequent
38. If Lisa stays up all night studying, then she'll be too tired to take the test; but if she doesn't stay up all night studying, then she'll fail the test. Since she must either stay up or not stay up, she will either be too tired to take the test or she'll fail the test.
- Modus ponens
 - Invalid
 - Constructive dilemma
 - Denying the antecedent
 - Destructive dilemma
39. Either your camera is broken or your film is defective. Since your film is indeed defective, we may conclude that your camera is all right.
- Disjunctive syllogism
 - Invalid
 - Denying the antecedent
 - Modus tollens
 - Affirming the consequent
40. If George drinks too much, then he won't be sober. But if George isn't sober, then he shouldn't drive home. Therefore, if George drinks too much, then he shouldn't drive home.
- Pure hypothetical syllogism
 - Constructive dilemma
 - Invalid
 - Destructive dilemma
 - Modus ponens
41. If Mary brushes with Sparkle toothpaste, then she doesn't have cavities. But she does have cavities. Therefore, Mary doesn't brush with Sparkle.
- Modus ponens
 - Pure hypothetical syllogism
 - Affirming the consequent
 - Modus tollens
 - Invalid
42. If James has the flu, he will miss tonight's game. But if he doesn't miss tonight's game, he will go to the dance after the game. Therefore, if James doesn't have the flu, he will go to the dance after the game.
- Disjunctive syllogism
 - Destructive dilemma
 - Invalid
 - Modus ponens
 - Pure hypothetical syllogism
43. If these plants are oleanders, then they're poisonous. These plants are not oleanders. Therefore, they're not poisonous.
- Invalid
 - Affirming the consequent
 - Modus ponens
 - Denying the antecedent
 - Modus tollens
44. If the city is to prevent excessive accidents, then it must salt the streets during the winter, but if it is to avoid damaging the cars, then it must not salt the streets. Since the city must either salt or not salt, then either it won't prevent excessive accidents or it won't avoid damaging the cars.
- Pure hypothetical syllogism
 - Constructive dilemma
 - Invalid
 - Affirming the consequent
 - Destructive dilemma
45. If these geraniums don't get enough sun, then they won't bloom. But these geraniums don't get enough sun. Therefore, they won't bloom.
- Denying the antecedent
 - Modus ponens
 - Affirming the consequent
 - Modus tollens
 - Invalid