

Answer Key

Lesson 2.3

Practice Level B

- 1.** Law of Detachment **2.** invalid **3.** Law of Detachment **4.** Law of Syllogism **5.** invalid
- 6.** Law of Syllogism **7.** deductive reasoning; Deductive reasoning is based on logic and order. If Walt is taller than Peter and Peter is taller than Natalie, then Walt is taller than Natalie.
- 8.** inductive reasoning; Inductive reasoning depends on previous examples and patterns to form a conjecture. If Brand Y costs more than Brand X and Brand X costs more than any other brand, then Brand Y costs more than all other brands.
- 9.** inductive reasoning; Inductive reasoning depends on previous examples and patterns to form a conjecture. Dana came to her conclusion based on previous examples.
- 10.** deductive reasoning; Deductive reasoning is based on logic and order. If Anthony is a 16–18 year old with a license in Nevada, then Anthony must have taken the required driver education.
- 11.** not valid; It does not say that Jeff is not allowed to play video games on Saturday afternoon. It says that he does not play video games on Saturday afternoon.
- 12.** not valid; Katie knows that all sophomores take driver education. It does not say that only sophomores take driver education. You do not know if Brandon is a sophomore.
- 13.** false; The mall is open. Therefore Jodi and Dan went shopping, and therefore Dan bought a pretzel. You cannot conclude that Dan also bought a pizza.
- 14.** true; The mall is open, therefore Jodi and Dan went shopping.
- 15.** true; The mall is open. Therefore Jodi and Dan went shopping, and therefore Jodi bought a pizza.
- 16.** false; The mall is open. Therefore Jodi and Dan went shopping, and therefore Dan bought a pretzel and Jodi bought a pizza. You cannot conclude whether or not Jodi had some of Dan's pretzel.
- 17.** D, B, A, E, C; The robot extinguishes the fire.