Ch. 3, Exercise I (1 pt each + 5 pts for completion)

(1) Conclusion
(3) Reason
(5) Reason
(7) Reason

Ch. 3, Exercise III (5 pts for completion)

(1) The sentence expresses an argument.
   1. Since
   2. Reason marker
   3. Premises: Chicago is north of Boston; Boston is north of Charleston
      Conclusion: Chicago is north of Charleston.
      *Standard form:* \(P_1: \text{Chicago is north of Boston.}\)
      \(P_2: \text{Boston is north of Charleston}\)
      \[\begin{array}{c}
      \hline
      \text{P}_1: \text{Chicago is north of Boston.} \\
      \text{P}_2: \text{Boston is north of Charleston} \\
      \text{------------------} \\
      \text{C: Chicago is north of Charleston.}
      \end{array}\]

(2) The sentence does not express an argument.

(3) The sentence expresses an argument.
   1. So
   2. Conclusion marker
   3. Premise: Texas has a greater area than Topeka; Topeka has a greater area than the Bronx Zoo
      Conclusion: Texas has a greater area than the Bronx Zoo.
      *Standard form:* \(P_1: \text{Texas has a greater area than Topeka.}\)
      \(P_2: \text{Topeka has a greater area than the Bronx Zoo}\)
      \[\begin{array}{c}
      \hline
      \text{P}_1: \text{Texas has a greater area than Topeka.} \\
      \text{P}_2: \text{Topeka has a greater area than the Bronx Zoo} \\
      \text{------------------} \\
      \text{C: Texas has a greater area than the Bronx Zoo.}
      \end{array}\]
Ch. 3, Exercise IV (5 pts for completion)

(3) [9] *Take it from me:* assuring; [10] *since:* none of these

(4) [11] *Whatever anyone tells you:* assuring (abusing the audience); [12] *little:* guarding (as opposed to *nothing*); [13] *for:* none of these

(5) [14] *show:* argument marker (conclusion); [15] *really:* assuring

Ch. 3, Exercise VI (2 pts each + 5 pts for completion)

(2) D
(4) E-
(6) D
(8) E-
(10) E- or D
(12) E-
(14) D
(16) D

Ch. 5, Exercise V (5 pts for completion)

(2) Valid; sound
(4) Valid; soundness depends on whether you take him to be good-looking, since he is pretty clearly smart
(6) Invalid; unsound
(8) Valid; sound

Ch. 5, Exercise VI (4 pts each + 5 pts for completion)

(1) Valid; sound
(2) Invalid; unsound
(3) Valid; unsound
(4) Valid; sound
(2) a. Nobody is tall. (An argument from the heap)

P₁: 1’ is not tall.

P₂: For any height, T, if T is not tall, T + ¼” is not tall.

3: If you begin the process of increasing height ¼” at a time, starting with 1’, you will always start at a height that is not tall and end up at a height that is not tall (by P₁ and P₂)

4: Any height you pick can be obtained from 1’ by successively adding ¼” at a time, so from (3), any height you pick is not tall

P₅: If no height is tall, then nobody is tall

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C: Nobody is tall

b. There is no difference between being tall and being short. (Conceptual slippery slope)

P₁: 8’ is tall.

P₂: For any height, T, if T is tall, T - ¼” is tall.

P₃: 1’ is short.

P₄: For any height, T, if T is short, T + ¼” is short.

P₅: If you add continuously subtract ¼” from 8’ and add ¼” to 1’, then you will eventually meet in the middle at 4.5’.

6: By P₂ and P₄, you will take 4.5’ to be both tall and short

P₇: (6) is a contradiction unless there is no difference between being tall and being short

P₈: We want to avoid contradictions

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C: There is no difference between being tall and being short.

(4) a. Heat is not real. (An argument from the heap)

P₁: 1⁰ F is not hot.

P₂: For any degree, T, if T is not hot, T+1⁰ F is not hot.

3: If you begin the process of increasing the temperature one degree at a time, starting with 1⁰ F, you will always start at a temperature that is not hot and end up at a temperature that is not hot (by P₁ and P₂)

4: Any temperature you pick can be obtained from 1⁰ F by successively adding 1⁰ at a time, so from (3), any temperature you pick is not hot
P5: If no temperature is hot, then heat is not real

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C: Heat is not real

b. There is no difference between being hot and being cold (Conceptual slippery slope)

P1: $1^0 F$ is cold.

P2: For any degree, $T$, if $T$ is cold, $T+.5^0 F$ is cold.

P3: $100^0 F$ is hot.

P4: For any degree, $T$, if $T$ is hot, $T-.5^0 F$ is hot.

P5: If you add continuously add $\frac{1}{2}$ degree to $1^0 F$ and subtract $\frac{1}{2}$ degree from $100^0 F$, then you will eventually meet in the middle at $50.5^0 F$

6: By P2 and P4, you will take $50.5^0 F$ to be both cold and hot

P7: (6) is a contradiction unless there is no difference between being hot and being cold

P8: We want to avoid contradictions

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C: There is no difference between being hot and being cold.

**Ch. 13, Ex. IV (2 pts each + 5 pts for completion)**

(1) S

(2) F

(3) C

(4) S

(5) C

(6) F

(7) S

**Ch. 14: Ex. II (5 pts for completion)**

(19) Miners Refuse to Work After Death: (a) the miners refuse to work after another miner dies; (b) the miners refuse to work after they have died (as zombie miners)

(20) Police Begin Campaign to Run Down Jaywalkers: (a) police begin a campaign to find and penalize jaywalkers; (b) police begin a campaign to run over jaywalkers
(21) **Red Tape Holds Up New Bridge:** (a) new bridge is delayed because of bureaucracy; (b) the new bridge is being held up in the air (over the river, say) by red-colored tape

(22) **Juvenile Court to Try Shooting Defendant:** (a) the shooting defendant will go on trial in juvenile court; (b) the juvenile court will try to punish the defendant by shooting her/him

(23) **Kids Make Nutritious Snacks:** (a) the kids are cooking up some nutritious snacks; (b) you can make nutritious snacks out of kids

**Ch. 14: Ex. IV (5 pts for completion)**

(10) ‘**any number**’: in mathematics vs. meaning *many*

(11) ‘**fiber**’: digestible fiber from grain vs. any kind of fiber whether or not it is digestible (e.g., wood pulp)

(12) ‘**law**’: an exceptionless law of nature (e.g., \(e=mc^2\)) vs. a law of the state (e.g., drive 25 mph in residential areas)