Answers to exercises in chapter 1 of Ian Hacking’s *An Introduction to Probability and Inductive Logic*

1. (a) yes; (b) no; (c) yes; (d) yes; (e) no; (f) yes; (g) no; (h) yes; (i) no; (j) no; (k) no; (l) no; (m) it’s a bit tricky: if it is a demand, it is not a proposition, if it is a statement of fact, then it is a proposition; (n) yes.

2. From Hacking:
   (a) *Valid*: All heads of horses are heads of chickens. All chickens are fish. So, all heads of horses are heads of fish.
   (b) *Invalid*: All heads of horses are heads of chickens. All fish are chickens. So, all heads of horses are heads of fish.

3. No.

4. b

5. a

6. (a) is valid-or-invalid. It is an argument. (b) is true-or-false. It is a conditional, if-then proposition.

7. None are valid.

8. Best: c; Weakest: you could make a case for any of a, b, or d. What’s important is making the case ...