## **Practice Problems**

- 1. When splitting a node, we find the best feature to split on that minimizes error (cost).
  - a. True
  - b. False
- 2. Which of the features  $(x_1, x_2, x_3)$  will a decision tree split on?

$x_1$	$x_2$	$x_3$	y
1	1	1	+1
0	1	0	+1
0	1	1	-1
1	0	0	-1

- 3. From the class example, what kind of person would be an ideal date for you on Tinder?
- 4. How many branches should decision trees have?
  - a. 2
  - b. 3
  - c. 7
  - d. There is no minimum requirement
- 5. What distribution should the data set assume for decision trees?