Lesson 6.5 Practice: Tree Diagrams

School Launch · Statistics · Unit 6: Probability · Worksheet A

Calculator / tables

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. A condition affects 2% of people. A test is positive for 86% of those who have it and 8% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). EASY

2. A condition affects 9% of people. A test is positive for 97% of those who have it and 5% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). EASY

3. A condition affects 5% of people. A test is positive for 85% of those who have it and 8% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). EASY

4. A condition affects 3% of people. A test is positive for 86% of those who have it and 2% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). MEDIUM

5. A condition affects 5% of people. A test is positive for 99% of those who have it and 6% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). MEDIUM

6. A condition affects 5% of people. A test is positive for 86% of those who have it and 5% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). MEDIUM

7. A condition affects 4% of people. A test is positive for 97% of those who have it and 8% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). MEDIUM

8. A condition affects 9% of people. A test is positive for 9% of those who have it and 1% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). HARD

9. A condition affects 5% of people. A test is positive for 87% of those who have it and 6% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). HARD

10. A condition affects 8% of people. A test is positive for 87% of those who have it and 8% of those who don't. Find $P(\text{positive})$ and $P(\text{has it} \mid \text{positive})$ (four decimals). HARD