Name _____ Date _____

LESSON 11.5

Practice A

For use with the lesson "Find Probabilities of Independent and Dependent Events"

For exercises 1 and 2, tell whether the events are *independent* or *dependent*.

1. Randomly choosing a oatmeal cookie, and then a peanut butter cookie from a container of cookies
2. Drawing the name "Sally" from a hat and replacing it, and then drawing the name "Malcolm" from the hat
3. Give an example of a pair of independent events.
4. Give an example of a pair of dependent events.

Events A and B are independent. Find *P*(A and B).

5. $P(\text{A}) = 0.6$, $P(\text{B}) = 0.4$
6. $P(\text{A}) = 0.3$, $P(\text{B}) = 0.15$
7. $P(\text{A}) = 0.22$, $P(\text{B}) = 0.4$

Events A and B are dependent. Find *P*(A and B).

8. $P(\text{A}) = 0.13$, $P(\text{B given A}) = 0.4$
9. $P(\text{A}) = 0.16$, $P(\text{B given A}) = 0.35$
10. $P(\text{A}) = 0.25$, $P(\text{B given A}) = 0.54$

11. A different letter is written on ten sheets of paper and placed in a stack. Describe a way to randomly choose one of the sheets of paper, and then another, so that the events are independent.
12. Tiedra has a desk organizer that contains 6 black pens and 8 blue pens. She randomly chooses a pen, and does not replace it. Then, she randomly chooses another pen. Find the probability that both pens are black.
13. Allen randomly chooses a ball from a storage cart that holds 5 red balls, 6 yellow balls, and 4 green balls, and then places the ball back in the cart. Then, he chooses a second ball. Find the probability that the first ball is red, and the second ball is green.
14. **Jeans** Clinton is shopping for jeans in a clothing store. On one rack, there are 7 pairs of relaxed fit jeans, 11 pairs of bootcut jeans, and 14 pairs of slim fit jeans. Clinton randomly chooses a pair of jeans without replacing them. Then, he randomly chooses another pair of jeans. Find the probability that both pairs of jeans are slim fit.