Name

LESSON

Date ____

Practice A 11.4

For use with the lesson "Find Probabilities of Disioint and Overlapping Events"

Events A and B are disjoint. Find P(A or B).

1. P(A) = 0.2, P(B) = 0.3 **2.** P(A) = 0.22, P(B) = 0.7 **3.** $P(A) = \frac{2}{7}, P(B) = \frac{5}{9}$ **4.** P(A) = 34%, P(B) = 45% **5.** $P(A) = \frac{1}{3}, P(B) = \frac{1}{5}$ **6.** P(A) = 0.73, P(B) = 0.08

Find the indicated probability.

8. P(A) = 47%, P(B) = 21% **9.** $P(A) = \frac{1}{2}, P(B) = \frac{2}{5}$ 7. $P(A) = \frac{1}{4}, P(B) = \frac{3}{4}$ P(A or B) = 0.25 $P(A \text{ or } B) = \frac{5}{6}$ $P(A \text{ or } B) = \frac{1}{2}$ P(A and B) = ?P(A and B) = ?P(A and B) = ?**10.** $P(A) = \frac{4}{9}, P(B) = \frac{1}{3}$ **11.** P(A) = 0.22, P(B) = 0.55 **12.** P(A) = 0.25, P(B) = 0.32P(A or B) = 0.15P(A or B) = 0.45 $P(A \text{ or } B) = \frac{1}{6}$ P(A and B) = ? P(A and B) = ?P(A and B) = ?

Find $P(\overline{A})$.

| 13. | P(A) = 0 | 14. $P(A) = 0.46$ | 15. $P(A) = \frac{3}{8}$ | 16. $P(A) = 0.93$ |
|-----|----------|--------------------------|---------------------------------|--------------------------|
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A card is randomly drawn from a standard deck of 52 cards. Find the probability of drawing the indicated card.

| 17. | Not an ace | 18. | A face card and a 4 |
|-----|--------------------------|-----|---------------------|
| 19. | A heart or a diamond | 20. | A 6 or a 7 |
| 21. | An ace <i>or</i> a spade | 22. | An ace and a spade |

- **23.** Tennis You and your best friend are members of a high school tennis team. The coach is about to pick one player to be the captain of the team. You estimate that there is a 34% chance you will be picked and a 54% chance that your best friend will be picked. What is the probability that either you or your best friend will be picked?
- **24.** Meteorology The probability that it will rain today is 65%, and the probability that it will rain tomorrow is 25%. The probability that it will rain both days is 35%. What is the probability that it will rain today or tomorrow?