8 – HW#2 Probability of Compound Events

Name: _____ Per: _____

You spin a spinner that has 12 equal-sized sections numbered 1 to 12. Find each probability.

1. *P*(3 or 4)

2. *P*(even or 7)

3. *P*(even or odd)

4. *P*(multiple of 3 or odd or 4)

5. *P*(odd or multiple of 5)

6. *P*(less than 5 or greater than 9)

7. *P*(even or less than 8)

8. *P*(multiple of 2 or multiple of 3)

9. *P*(odd or greater than 4)

10. *P*(multiple of 5 or multiple of 2)

11. What is the complement of P(even or 7)? What does it represent?

Decide if each set of events is mutually exclusive or overlapping.

12. Draw a card from a deck. What is the probability of it being a diamond or a face card?

13. Roll a die and flip a coin. What is the probability of getting a 4 or heads?

A survey of couples in a city found the following probabilities:

a. The probability that the husband is employed is 0.85.
b. The probability that the wife is employed is 0.60.
c. The probability that both are employed is 0.55.

A couple is selected at random. Use a Venn diagram to find the probability that:
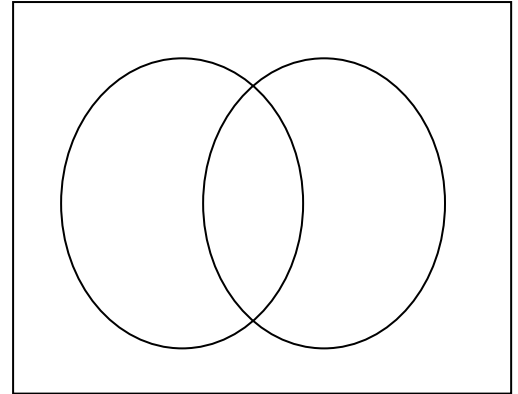
14. at least one of them is employed.

15. neither is employed.
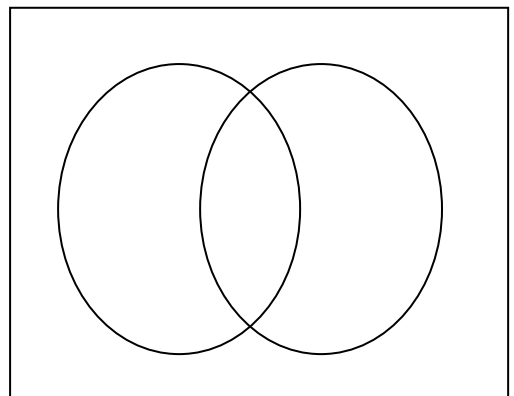
Amber, a college senior, interviews with Acme Corp. and Mills, Inc. The probability of receiving an offer from Acme is 0.35, from Mills is 0.48, and from both is 0.15.

16. Find the probability of receiving an offer from either Acme Corp. or Mills, Inc., but not both.

17. Find the probability of not receiving an offer at all.

A group of 60 students were asked if they played field hockey (F), basketball (B) or soccer (S). The diagram below displays the results.
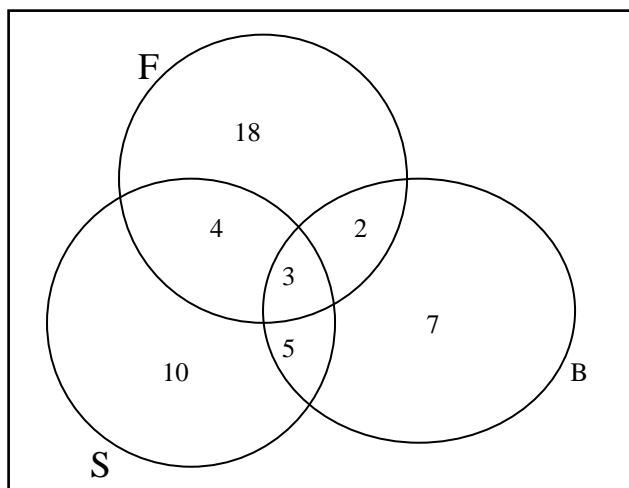
What is the probability that a person chosen at random plays:

18. field hockey & basketball?

19. field hockey & soccer?

20. field hockey or basketball?

21. neither of the three sports?

22. only 1 sport?