

Directions for Card Swap:

Number the cards on the back.

Arrange students in groups of 3 or 4.

Give each student a blank answer sheet.

Give each group one card. Place the remaining cards face-down on a table at the front of the room.

Each group should work together on their question. One member of the group should check their answer with the teacher (a different person each time to share responsibility). The teacher just says “correct” or “wrong”. If the group is correct, they put their card on the table (face-down) and select a new card. If they are wrong, they try to rework the question.

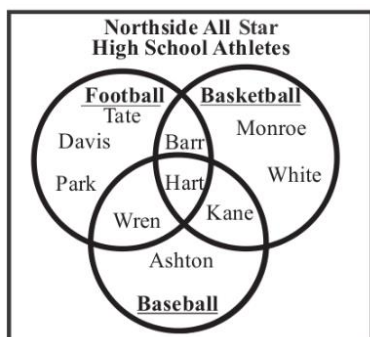
Each group should try to successfully complete all 24 questions.

I also post questions and answers on typepad so they don't have to worry about copying them down!

Probability Review Flashcard Swap

<p>1. You go to an ice cream store to get a treat of either ice cream or frozen yogurt. At the store you can choose from either 13 different flavors of ice cream or 7 different flavors of frozen yogurt. How many different choices do you have at the ice cream store?</p>	<p>2. Michelle has 5 hats, 3 scarves, and 7 pairs of mittens. In how many different ways can she wear a hat, a scarf, and a pair of mittens?</p>	<p>3. Based on data from the National Conference of Bar Examiners, the probability of someone failing a bar exam is 0.43. Find the probability of someone passing the bar exam.</p>
<p>4. There are 6 red apples, 4 yellow apples, and 2 green apples in a bucket. Maria will choose two apples at random without replacement. What is the probability that Maria will choose a red apple, then a yellow apple?</p>	<p>5. Find:</p> <p>a. $\{m, a, t, h\} \cap \{s, m, a, r, t\}$</p> <p>b. $\{m, a, t, h\} - \{s, m, a, r, t\}$</p> <p>c. $\{m, a, t, h\} \oplus \{s, m, a, r, t\}$</p>	<p>6. True or false?</p> <p>a. $\{1, 2, 3\} \subset \{\text{whole \#s}\}$</p> <p>b. $\{a, c, t\} \subset \{c, a, t\}$</p>

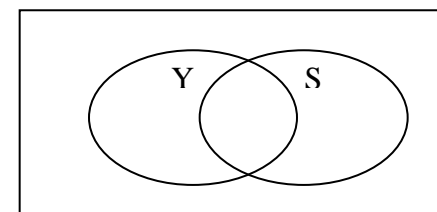
Probability Review Flashcard Swap



7. Find:
- basketball – baseball
 - football \cap baseball

8. In a particular dormitory, there are 350 college freshmen. Of these, 312 are taking an English course (E) and 108 are taking a mathematics course (M). If 95 of these freshmen are taking courses in both English and mathematics, find $P(\overline{E \cup M})$?

9. Put the names of the 12 months onto the Venn diagram. Let Y=months ending in “y” and let S=one syllable months. Then find $Y \cap S$.



10. Given:
 $S = \{2 \cdot x, 3 \cdot y, 1 \cdot z\}$
 $T = \{5 \cdot x, 1 \cdot y, 4 \cdot z\}$

- Find:
- $S \cup T$
 - $S \cap T$
 - $T - S$
 - $|T|$

11. Eric has 4 sandwiches, 2 salads, and 3 drinks. He will choose a sandwich, a salad, and a drink, or he will choose a salad and a drink. Find the number of combinations possible.

12. What is the formula for finding $P(A \text{ and } B)$ when A and B are dependent events.

Probability Review Flashcard Swap

13. You are holding a standard deck of 52 cards and your friends selects two cards at random (without replacing them). What is:

$P(J \text{ and } A)$
(hint: the order does not matter)

14. A teacher has 8 red crayons, 5 blue crayons, 4 purple crayons, and 6 black crayons in a basket. A student reaches into the basket and randomly selects a crayon. What is the probability that the crayon will be either blue or black?

15. There are 6 red apples, 4 yellow apples, and 2 green apples in a bucket. Maria will choose two apples at random without replacement. What is the probability that Maria will choose a red apple and a green apple?

16. You roll two standard six-sided die.
Find $P(2 \text{ odd numbers})$

17. You roll two standard six-sided die.
Find $P(4 \text{ and } 5)$

18. You roll two standard six-sided die.
 $P(\text{sum greater than or equal to } 10)$

Probability Review Flashcard Swap

19. Two dice are rolled and the sum is recorded.

Find:

a. $P(\text{sum greater than 1})$

b. $P(\text{sum less than 2})$

	Wear glasses	Do not wear glasses
Fresh.	320	857
Soph.	130	732

20. $P(\text{freshman})$

	Wear glasses	Do not wear glasses
Fresh.	320	857
Soph.	130	732

21. $P(\text{freshman who wears glasses})=$

	Wear glasses	Do not wear glasses
Fresh	320	857
Soph.	130	732

22. $P(\text{wears glasses given that the student is a sophomore})=$

	Wear glasses	Do not wear glasses
Fresh	320	857
Soph.	130	732

23. $P(\text{do not wear glasses or freshman})=$

24. You are holding a standard deck of 52 cards and your friends selects one card at random. What is the probability her card is:

$P(\text{less than 6 or spade})$
(hint: aces are counted as low)