

Cards (standard deck)

Select two cards without replacement.

Find:

16. $P(\text{King and Queen})$

17. $P(\text{Black and Red})$

18. $P(\text{Ace and Ace})$

19. $P(\text{Face card and Face Card})$

Select only one card.

Find:

20. $P(\text{Red or King})$

21. $P(\text{Ace})$

22. $P(\text{Heart or King})$

23. $P(\text{Ace and King})$

The probability distribution for x = the number of previous prison terms for inmates at California Men's Colony is:

x	$P(x)$
0	.25
1	.3
2	.15
3	.3

24. What proportion of inmates served two or less prior terms?

25. Find the mean ($E(x)$) of x .

26. Find the standard deviation of x .

In the game "Plinko" on *The Price is Right*, a contestant drops a chip, which randomly falls into a slot that is marked with a dollar amount. There are nine slots, two marked \$0, two marked \$100, two marked \$1000, two marked \$5000, and one marked \$10000.

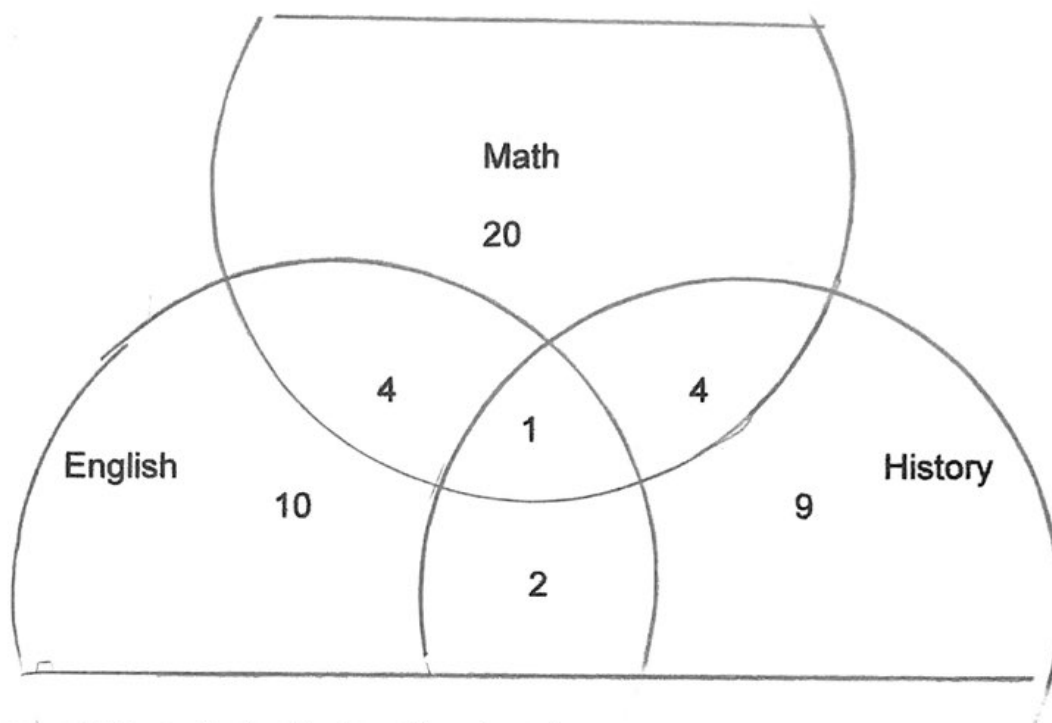
27. Fill in the probability distribution table.

<u>x</u>	<u>P(x)</u>
0	2/9
100	—
1000	—
5000	—
10000	—

28. Find the probability the chip lands in a slot less than \$1000.

29. Find the expected value for this game.

A survey was taken asking the students what their favorite class was at MBU. As you can see, 50 students responded.



Find the probability a student's favorite class is:

- | | |
|---------------------------|------------------------|
| 30. Math | 31. Only English |
| 32. Both Math and History | 33. History or English |
| 34. All three classes | 35. Only one class |
| 36. Math given English | 37. English given Math |

When you are done with this quiz, give it to Professor Smith and say, "Thank you so much for the quiz!! You are truly my favorite Statistics professor!!". You may now quietly leave...