1. For two weeks, Mark recorded the color of the traffic light at the intersection of Main Street and North

 Avenue as his school bus approached the intersection. The results were: red, red, red, red, red, red,green,

 red, red, yellow.

Make a frequency table for the data.

|  |  |  |  |
| --- | --- | --- | --- |
| A. |  | C. |  |
| B. |  | D. |  |

1. A bag contains red, blue, and green marbles. When one marble is chosen at random from the bag, the probability that it is red is 7/19 and the probability that is it blue is 4/19. What is the probability that it is green?
2. A hat contains 3 red, 4 blue, and 5 green tickets. If one ticket is chosen at random, what is the probability that it is red or blue?

The sample space for rolling a six sided die is S = { 1,2,3,4,5,6}. Let *A* be an event of rolling a 2; then *A* = {2}. If A is a subset of S, write the complement of event *A.*

1. In a survey of her class Julio found that 17 students travelled to school by train, 13 travelled by bus and 6 travelled by both train and bus. There were 30 students in Sally’s class. Draw a Venn diagram to represent this information.
2.

5. Thomas bought a bag of jelly beans that contained 10 red jelly beans, 15 blue jelly beans, and 12 green jelly beans. What is the probability of Thomas reaching into the bag and pulling out a blue or green jelly bean?

1. At Enloe High, 35% of students have part time jobs and 25% of students are on the honor roll. What is the probability that a student chosen at random has a part time job and is on the honor roll?
2. Each person in a group of students was identified by year and asked when he or she preferred taking classes: in the morning, afternoon, or evening. The results are shown in the table. Find the probability that the student preferred afternoon classes given he or she is a junior. Round to the nearest thousandth.

When Do You Prefer to Take Classes?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Freshman** | **Sophomore** | **Junior** | **Senior** |
| **Morning** | 19 | 2 | 6 | 16 |
| **Afternoon** | 17 | 3 | 13 | 15 |
| **Evening** | 8 | 14 | 9 | 7 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A. | 0.571 | B. | 0.464 | C. | 0.342 | D. | 0.158 |

1. What is the probability of randomly selecting a card from a standard deck and having the card be a black card or a face card?
2. What is the probability of randomly selecting a card from a standard 52 card deck and having the card be a face card or an odd numbered card? (do not include aces)
3. What is the probability of randomly selecting a card from a standard 52 card deck and having the card be a even numbered card?
4. What is the probability of choosing a card from a deck of cards that is a spade or a 8?

P(choosing a spade or a 8)

1. 2 dice are tossed. What is the probability of obtaining a sum less than 6?

13 . The table shows the results of a survey of college students. Find the probability that a student is taking a humanities class, given the student is male. Round to the nearest thousandth.

First Class of the Day for College Students

|  |  |  |
| --- | --- | --- |
|  | **Male** | **Female** |
| **Humanities** | 70 | 80 |
| **Science** | 50 | 80 |
| **Other** | 60 | 70 |
| A. | 0.171 | B. | 0.467 | C. | 0.269 | D. | 0.389 |