

NAME: _____

P.I. A.S.20: Calculate the probability of an event and its complement

1. Eight balls numbered from 1 to 8 are placed in an urn. If one ball is selected at random, find the probability that it is not number 6.

[A] $\frac{1}{2}$ [B] $\frac{1}{8}$ [C] $\frac{3}{4}$ [D] $\frac{7}{8}$

2. Diego is in the bowling club. There are 33 students in the club. Four of them will be picked at random to attend an awards banquet. What is the probability that Diego will *not* be picked to attend the banquet?

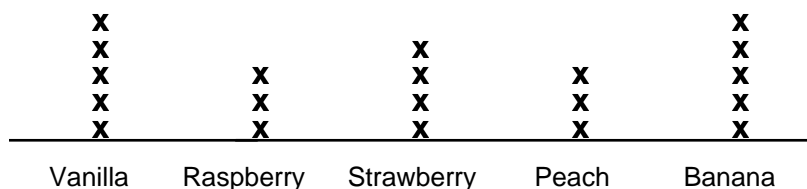
[A] $\frac{33}{29}$ [B] $\frac{4}{33}$ [C] $\frac{33}{4}$ [D] $\frac{29}{33}$

3. The probability of getting a hit off Randy's pitching in any game is 23%. What is the probability of *not* getting a hit?

4. Suppose Janice has a 35% chance of winning the raffle at her school's carnival. What is the probability that she will *not* win the raffle? Express your answer as a percent.

5. Use the data in the line plot below to find $P(\text{not vanilla})$.

Favorite Flavors of Yogurt



[1] D

[2] D

[3] 77%

[4] 65%

[5] $\frac{15}{20} = \frac{3}{4}$