# Algebra 2 Bellwork Tuesday, April 5, 2016

1. You take a survey asking people what their favorite UEFA Champions League team is. The results are in the table below:

| | Real Madrid | Dortmund | AC Milan | Chelsea FC | Arsenal FC | Total |
|---|---|---|---|---|---|---|
| Male | 15 | 13 | 18 | 22 | 37 | 105 |
| Female | 23 | 17 | 14 | 8 | 16 | 78 |
| Total | 38 | 30 | 32 | 30 | 53 | 183 |

You will select one person at random. Find each probability as a fraction.

a) P(Dortmund or Chelsea FC)=

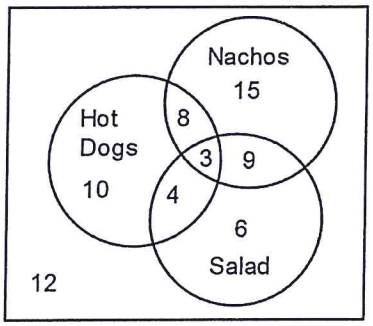
b) P(AC Milan and Male)=

c) P(Female or Real Madrid)=

d) P(Neither Arsenal FC nor Male)=

e) If you asked 60 more people what their favorite UEFA team is how many of them would select AC MIlan?

2. Below is a Venn Diagram about lunch food that students like. You will select a person at random. Find each probability as a fraction.




a) P(likes Hot Dogs or Salad)

b) P(likes Nachos and Hot Dogs)

c) P(likes Nachos only)

d) P(dislikes Salad)

e) Write a probability whose answer is 10+12

f) Write a probability whose answer is 6+9

Algebra 2 Bellwork Tuesday, April 5, 2016 ANSWERS

1. You take a survey asking people what their favorite UEFA Champions League team is. The results are in the table below:

| | Real Madrid | Dortmund | AC Milan | Chelsea FC | Arsenal FC | Total |
|---|---|---|---|---|---|---|
| Male | 15 | 13 | 18 | 22 | 37 | 105 |
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| Total | 38 | 30 | 32 | 30 | 53 | 183 |

You will select one person at random. Find each probability as a fraction.

a) P(Dortmund or Chelsea FC)= $\frac{30+30}{183}$ $\frac{60}{183}$

b) P(AC Milan and Male)= $\frac{18}{183}$

c) P(Female or Real Madrid)= $\frac{93}{183}$ $78+15$ or $78+38-23$

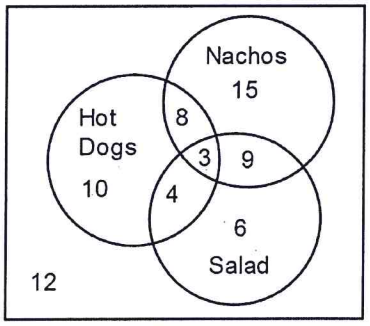
d) P(Neither Arsenal FC nor Male)= $23+17+14+8$ $\frac{62}{183}$

e) If you asked 60 more people what their favorite UEFA team is how many of them would select AC MIlan?

$$\frac{32}{183} = \frac{x}{60} \quad \approx 10$$

2. Below is a Venn Diagram about lunch food that students like. You will select a person at random. Find each probability as a fraction.

TOTAL # STUDENTS = 67




a) P(likes Hot Dogs or Salad) = $\frac{40}{67}$

b) P(likes Nachos and Hot Dogs) = $\frac{11}{67}$

c) P(likes Nachos only) = $\frac{15}{67}$

d) P(dislikes Salad) = $\frac{45}{67}$

e) Write a probability whose answer is 10+12

f) Write a probability whose answer is 6+9