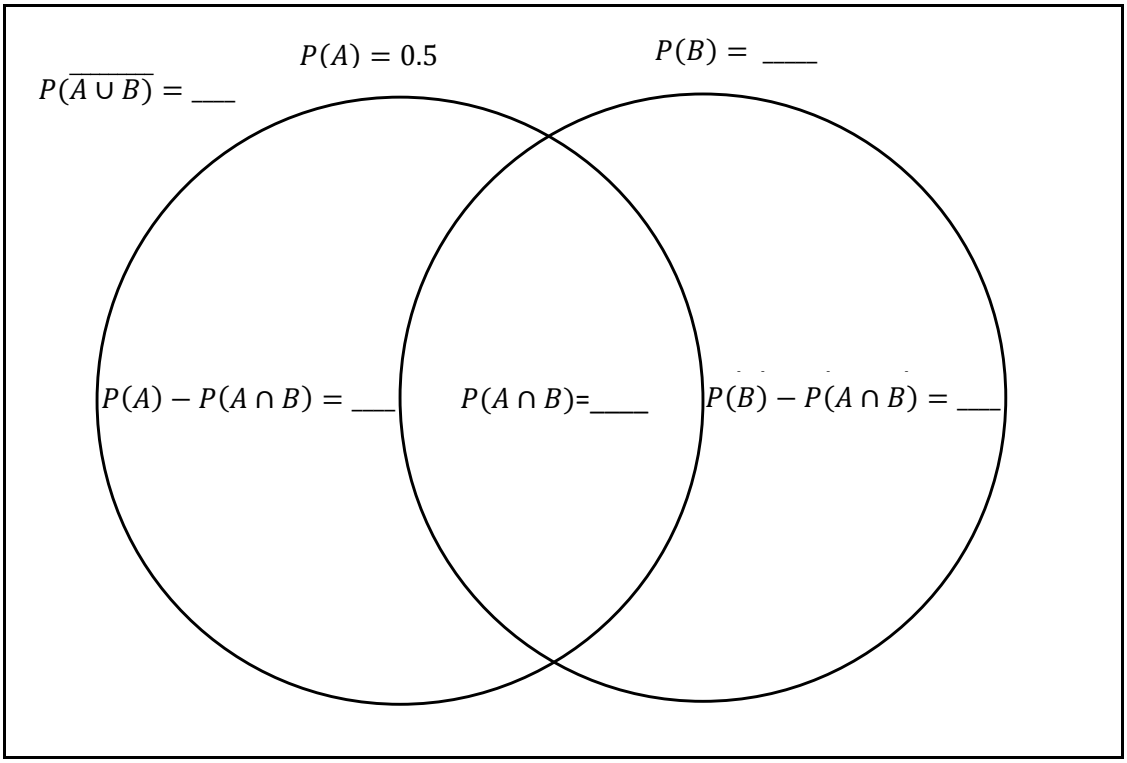
How Odd Con't

Name_____
Date_____Period____

1. Venn Diagrams can also be drawn using probabilities rather than outcomes. The Venn diagram below represents the probabilities associated with throwing two dice together. In other words, we will now look at the same situation as we did before, but with a focus on probabilities instead of outcomes.



a. Fill in the remaining probabilities in the Venn diagram.

b. Find $P(A \cup B)$ and explain how you can now use the probabilities in the Venn diagram rather than counting outcomes.

c. Use the probabilities in the Venn diagram to find $P\left(\overline{B}\right)$.

d. What relationship do you notice between $P\left(B\right)$ and $P\left(\overline{B}\right)$? Will this be true for any set and its complement?