

HW 9.6 Due 5/24 or 5/25

- Ruby rolls a six-sided die. Find the probability of the outcome below (Give your answer in decimal or fraction form):
 - $P(\text{less than } 3) =$
 - $P(\text{at least } 5) =$

- In a game a player rolls two 6-sided dice. If you roll a sum of 2 or 12 you win. If you roll a sum of seven you lose.
 - Use an area model or tree diagram to represent all possible outcomes.

 - What is the probability of winning on the first roll?

 - What is the probability of losing on the first roll?

 - Is it more likely to win or lose? Why?

- At a mall, 80% of the stores sell clothes, 25% of the stores sell shoes and 15% of the stores sell both clothes and shoes.
 - What % of the stores sell clothes OR shoes? Is this a union or an intersection?

 - What % of the stores sell clothes AND shoes? Is this a union or an intersection?

 - Are these mutually exclusive events? Why or why not?

 - What % of stores sell only clothes and no shoes?

 - What % of stores sell neither clothes nor shoes?