

ATHS – Math Department Al Ain – Gr 12 core Homework worksheet (2) on Lesson 0.5

Students Name	
Class:	

Lesson 0.5 (Adding probabilities)

- 1) Suppose that 1400 students , 550 take Spanish , 700 take biology and 400 take both ,What is the probability that a student selected at random takes Spanish or biology

- 2) What is the probability of drawing a king or spade from a deck of 52 cards

- 3) Omar has a stack of 8 baseball cards , 5 basketball cards and 6 soccer cards if he selects a card at random from the stack what is the probability that it is baseball or soccer card

- 4) Determine whether the events are mutually exclusive or not mutually exclusive then find the probability
- a) Two dice are rolled
Find $P(\text{sum} < 4 \text{ or } \text{sum} > 6)$

 - b) Two dice are rolled
Find $P(\text{multiple of } 2 \text{ or } \text{product} > 20)$

 - c) A card is drawn from a standard playing cards
Find $P(\text{number or red card})$

 - d) A card is drawn from a standard playing cards
Find $P(\text{club or a face card})$

 - e) A card is drawn from a standard playing cards
Find $P(\text{diamond or a red card})$

5) There are 540 students on a high school 300 of them are girls. 180 students take the school transportations 93 of them are girls. 78 boys come to school by cars. 150 students walk to school. And there's no students use any other way to get to school. If student was chosen randomly what is the probability that this student

a) (walks to school or is a girl)

b) (Goes to school by car or uses the school transportation)

c) (Is a boy or goes to school by car)

6) A card is drawn from a standard deck of 52 cards

a) Find the odds in favor in drawing a spade. Then find the odds against drawing a red king

b) Find the odds in favor of drawing a black card. Then find the odds against drawing a number card