

AP STATISTICS

(Section 5.2)

Name(s) _____

1. Suppose you toss one coin and then roll one six-sided die.

- a. List the outcomes in the sample space

- b. Find the probability of getting a head

- c. Find the probability of getting a 1, 2 or 3 on the die

- d. Find the probability of getting a head or a five

2. Below is data on students in a statistics class:

	Juniors	Seniors
Males	12	8
Females	10	6

- a. Find the probability of randomly selecting a junior or a female

- b. Find the probability of randomly selecting a student who is not a junior male

- 3.** Consolidated Builders has bid on two large construction contracts. The company president believes that the probability of winning the first contract (event A) is 0.6, that the probability of winning the second contract (event B) is 0.3 and that the probability of winning both contracts is 0.1.

a. Construct a Venn diagram that summarizes what you know about events A and B:

b. Calculate the following probabilities:

i. $P(A \cup B)$

ii. $P(A \cap B)$

iii. $P(A \cap B^c)$

iv. $P(A^c \cup B)$

v. $P(A^c \cap B^c)$