

Mathematics 3202
Assignment II
Unit 1 Probability

Section 1.3/1.4

Name: _____

Things that need to be addressed again.

1 Measure the lines indicated below to:

A) _____ B) _____ C) _____

nearest inch

Ans A _____ Ans B _____ Ans C _____

nearest $\frac{1}{8}$ th of an inch

Ans A _____ Ans B _____ Ans C _____

nearest $\frac{1}{16}$ th of an inch

Ans A _____ Ans B _____ Ans C _____

nearest cm

Ans A _____ Ans B _____ Ans C _____

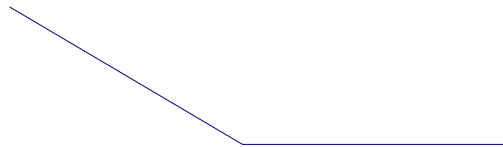
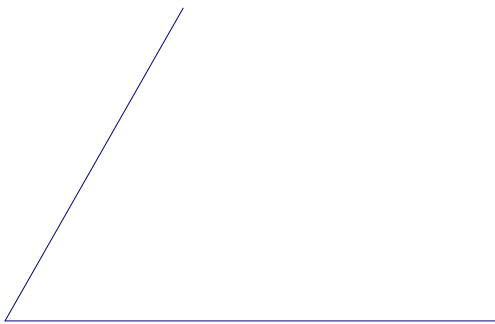
nearest half cm

Ans A _____ Ans B _____ Ans C _____

nearest mm

Ans A _____ Ans B _____ Ans C _____

2 Measure the following to the nearest



nearest multiple of 10°

nearest multiple of 10°

nearest multiple of 5°

nearest multiple of 5°

nearest degree

nearest degree

3 A carpenter is installing crown moldings and has to have one angle that measures 22.5° . He saw one molding and he measures the angle to be 23.5° . Comment on his:

A) accuracy

B) precision

4 In a deck of cards as displayed to the right then are 26 red (13 diamonds, 13 hearts) and 26 black (13 spades, 13 clubs). Determine

A) the probability of selecting a heart as a fraction and percent.

B) the probability of selecting a black card in words

C) the probability of selecting a face card (Jack,



Queen or King)

D) the odds in favor of selecting a heart or a club

E) the odds in favor of selecting a face card

F) the odds against selecting a face card

3 Determine the probability of each even if:

A) odds in favor of an even are 1:5


B) odds against the even are 6:1

C) Odds in favor are 50:1

D) odds against the Event are 1:1

E) odds against are 3:1

4

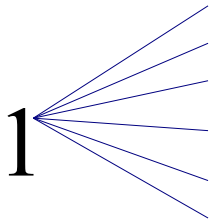
	Tuesday Afternoon	Tuesday Evening	Tuesday Overnight	Wednesday Morning	Wednesday Afternoon
					
	Cloudy periods	Variable cloudiness	Variable cloudiness	Cloudy with showers	Cloudy with showers
<u>Temp.</u>	23°C	21°C	14°C	16°C	19°C
<u>Wind</u>	S 15km/h	S 10km/h	SE 5km/h	SE 10km/h	NE 10km/h
<u>Relative Humidity</u>	45 %	53 %	72 %	77 %	77 %
<u>P.O.P.</u>	20 %	20 %	30 %	40 %	60 %
<u>Rain</u>	-	-	-	less than 1 mm	close to 1 mm

A) What is the probability of precipitation on Wednesday morning as a percentage and a reduced fraction?

B) What is the probability of it not raining on Tuesday as a fraction and percentage.

C) What are the odds of precipitation on Wednesday pm.?

- 5 Draw a tree diagram for the rolling of two dice. List all outcomes in the format of $\{1,1\}$, $\{1,2\}$, $\{1,3\}$...etc



2

Outcomes:

Total outcomes:

- A) What is the probability of rolling two sixes in a row?
 - B) What is the probability of rolling a sum greater than 5?
 - C) What is the probability of rolling a greater than 7?
 - D) What are the odds in favor of rolling “snake eyes”?
 - E) What are the odds against rolling “snake eyes”?
 - F) Which is more likely to happen rolling a sum of 5 or rolling a sum of 9?
 - G) What are the odds against rolling a sum of 10?
- 6 A coin and a di are tossed. Draw a tree diagram and list all the outcomes.

7 You must use the smart board for parts of this question.

- A) What is the theoretical probability of rolling heads on a coin?

- B) In an experiment you toss the coin 40 times. How many times would you expect it to turn up heads in 40 tosses? Why?

- C) Toss the coin 40 times using the smart board. How many times did it turn up heads? _____ Record how many times it turn up heads /40. This is known as the _____ probability.

8 What results would you expect from each experiment?

- a)** You flip a coin 50 times.
- b)** You roll one die 60 times. How many 3s would you get?
- c)** You cut a deck of cards 40 times. How many hearts would you get?
- d)** You roll one die 80 times. How many times would you roll an odd number?