

Ch.14 Test: tomorrow!

- Handwritten notes on a 3x5 index card may be used.



- A calculator is required.



Is the battery charged?

- Complete review #1 and #2.

- Refer to ch.14 Prob/Stats sheet for extra practice (green)



- Study probability notes (gold sheet)

One 3x5 card of notes may be used on the ch.14 test. You may write **formulas, **calculator commands**, and **examples** on both sides of the index card.**



The index card will be stapled to your test and handed in on Thursday.

Some suggestions for index card:

Calculator commands:

2nd DISTR

2:normalcdf(*lower, upper, μ , σ*)

To calculate one variable statistics,

press: STAT ► CALC

1:1-Var Stats <enter> L₁ <enter>

Normal
curve:
68%
95%
99.7%

Binomial Theorem:

binompdf(# trials, probability of desired event, # of occurrences)
n r

binomcdf(# trials, prob of desired event, maximum # of occurrences)

“exactly” → binompdf

“at most” or “no more than” → binomcdf

“at least” → $1 - \text{binomcdf}$
(# trials, prob, occurrences - 1)

$$P(A \text{ and } B) = P(A) \cdot P(B)$$

Note \rightarrow A and B are **independent** events (replacement included)

$$P(A \text{ and } B) = P(A) \cdot P(B \text{ following } A)$$

Note \rightarrow A and B are **dependent** events (no replacement, ok to use ${}_n C_r$)

multiply

add

Mutually exclusive events cannot happen at the same time. $P(A \text{ or } B) = P(A) + P(B)$

NOT mutually exclusive events are where some objects can satisfy (include) the conditions of both events. $P(A \text{ or } B) = P(A) + P(B) - P(\text{both})$

Conditional Probability reduces the sample space since an event has already occurred.

$P(A|B)$ = the probability of “event A”
given “event B.”

2nd

desired outcome

(only look for
items in reduced
sample space)

1st

Use sample space
to count reduced
number of total items
based on given information

NOT PROVIDED ON TEST!!

- 52 cards → 4 suits
(spades, hearts, clubs, diamonds)

black ♠

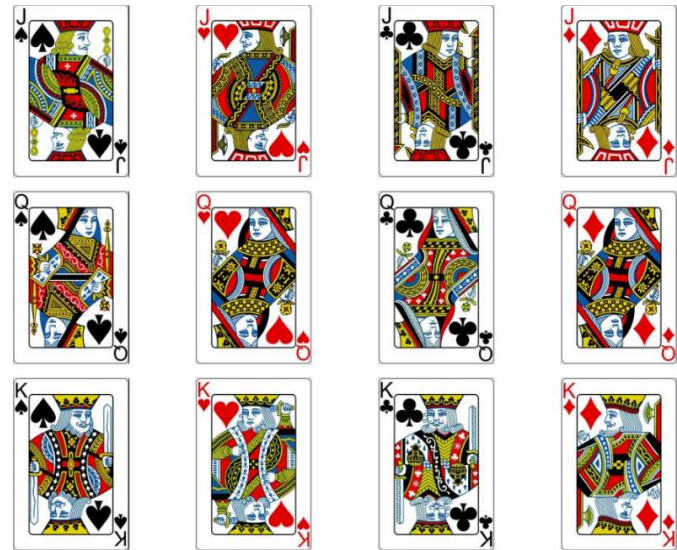
red ♥

black ♣

red ♦

- Each suit has 13 cards

- Face cards: Jack,
Queen,
King



- Aces are low unless stated otherwise
(Ace = 1)



IMPORTANT:

This PowerPoint of notes isn't all inclusive. You will find other useful formulas, notes, and calculator commands in your Ch.14 notes that are not included in this presentation.



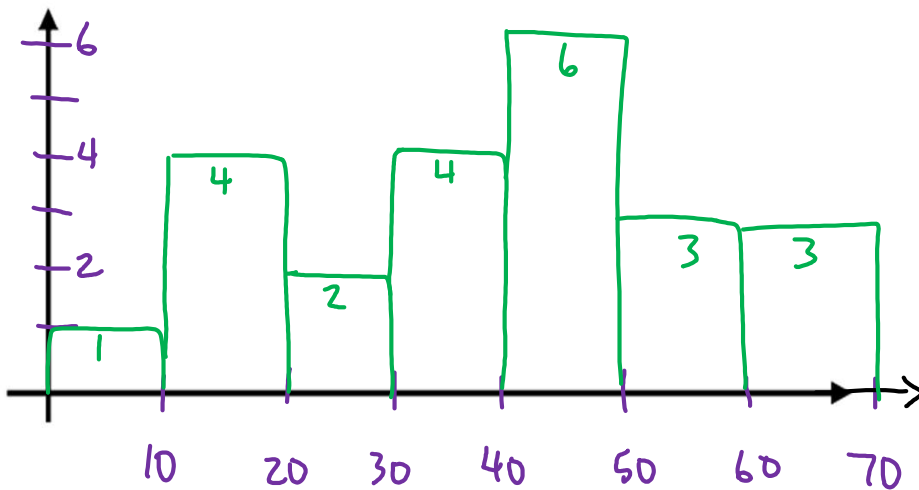
Ch.14 review#1 CHECK ANSWERS

problem #4

4. Enter the following values into a calculator and sort.

8 23 11 34 35 12 15 47 51 61 56 48
12 35 62 49 47 28 44 68 35 42 53

- Complete the frequency table, then sketch a histogram.
- Create a stem-and-leaf plot.
- State the mean, median, mode, and standard deviation.



check answers #3-4					
14	17	17.49	18	20	
25	35	38.09	42		
1	2	3	3	4	6

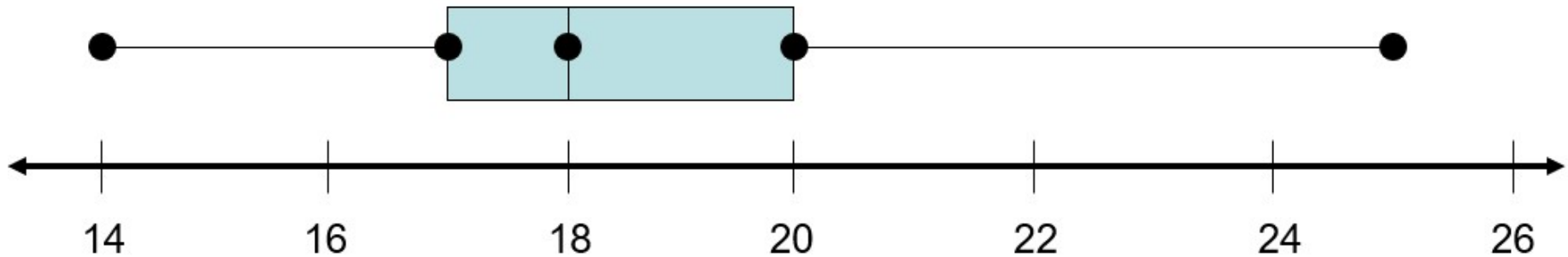
interval	frequency
0-10	1
10-20	4
20-30	2
30-40	4
40-50	6
50-60	3
60-70	3

stem	leaf
0	8
1	1 2 2 5
2	3 8
3	4 5 5 5
4	2 4 7 7 8 9
5	1 3 6
6	1 2 8

key: 6 | 1 = 61


Ch.14 review#1 CHECK ANSWERS

problem #3



3. Enter these quiz scores into a calculator:

14, 18, 16, 20, 22, 18, 19, 20, 25, 18, 16, 18

- a. State the five-number summary.  min = 14
Q₁ = 17
med = 18
Q₃ = 20
max = 25
- b. Sketch a box-and-whisker plot.