

BE-1B WEDNESDAY 2-21-07

AHSGE WORKBOOK

<u>Page</u>	<u>Problem(s)</u>
86	1, 2
84	3
85	9
80	7

💡 USE ALGEBRA!

💡 WRITE KEY INFORMATION DOWN

💡 USE MEANINGFUL VARIABLE NAMES

💡 I AM NOT SURE IF I CAN
THAT IS WHY I AM ASKING FOR HELP!
A = 10
B = 40 ...

A deli offers 10 sandwich choices,
12 side dishes, and 7 beverages.
How many different lunches can be
ordered if you choose 1 sandwich,
1 side dish, and 1 drink?

FUNDAMENTAL
COUNTING
PRINCIPLE

THE TOTAL NUMBER OF
CHOICES CAN BE FOUND
BY MULTIPLYING THE
NUMBER OF CHOICES FOR
EACH item.

$$\begin{array}{ccccc} \text{EX)} & 10 & \cdot & 12 & \cdot & 7 & = \\ & \uparrow & & \uparrow & & \uparrow & \\ & \text{CHOICES} & & \text{CHOICES} & & \text{CHOICES} & \\ & \text{OF} & & \text{OF} & & \text{OF} & \\ & \text{SANDWICH} & & \text{SIDE} & & \text{DRINK} & \end{array}$$

840 DIFFERENT
LUNCH
CHOICES

EX. 2
PG 755
CH. 14-1

(2.)

How many ways can you
arrange 4 books on a shelf?

$$4 \cdot 3 \cdot 2 \cdot 1 = 24$$

↑ ↑ ↑ ↑
of # of # of # of
choices choices choices choices
for for for for
1st book 2nd book 3rd book LAST
BOOK

$$4! = 4 \cdot 3 \cdot 2 \cdot 1$$

READ "four factorial"

How many ways can you
arrange 10 DVD's on a shelf?

$$10! = 3,628,800$$

HW: Read CH. 14-1 Pg 756-757 # 8, 12, 15, 16.