

**GRADE 11 ESSENTIAL
PROBLEM SOLVING
MAKE A TABLE**

Name: _____

Date: _____

Different Strategies. There are many strategies to solve a problem. Guess and Check; Make a list; Work Backwards; Solve a Simpler Problem; Make a Table; Draw a Picture; Use Logical Reasoning; Use a Venn Diagram; and more.

MAKE A TABLE. A table is a tabulated list of calculations. Calculations are performed 'recursively' (a single step at a time) normally, until the answer is achieved.

Show Work: A numerical answer is not sufficient!

1. Kara's parents put \$400 in a savings account on Kara's first birthday. Each year on her birthday they put in \$300 more than on her last birthday.

- A. What will the total be when Kara is 7 years old?
- B. What will the total be when Kara is 10 years old?

Age	1	2	3	4						10
Amount	400	700	1,000	1,300						
Total	400	1,100	2,100							

2. Dr. Dorque wrote a book called 1001 Random Numbers in Ascending Order. In the first month after it was published, 10 copies were sold. In the second month, 30 copies were sold. In the third month, 60 copies were sold. In the fourth month, 100 copies were sold. If this pattern continues:

- A. How many copies will be sold in the tenth month?
- B. How many copies will be sold altogether in a year?

3. A subway train left downtown with 330 passengers aboard. At the first stop, 1 person got off. At the second stop, 4 people got off. At the third stop, 7 people got off. At the fourth stop, 10 people got off. If this pattern continues:

- A. How many people will get off at the 7th stop?
- B. How many stops will the train have made when all the passengers are off?

Ans: 1) \$9,100 ; \$17,500 2) 550 ; 3640 3) 311 ; 15 stops