

Name: \_\_\_\_\_

# Skill Set 8: Make a List/Table

PS

Making a list or a table of the information given in a problem helps organize the data. This makes it easier to see missing data or recognize patterns.

### Example:

When flipped in the air, a coin can land on either heads (H) or tails (T). Make a list of all possible outcomes when three coins are flipped one at a time. List the combinations that give you two heads out of three coins.

#### Think

- List all of the possible outcomes systematically.
- Count the number of outcomes that satisfy the question.

#### Solve

Coin 1	Coin 2	Coin 3	
H	H	H	
H	H	T	✓
H	T	H	✓
T	H	H	✓
H	T	T	
T	H	T	
T	T	H	
T	T	T	

★ Answer HHT, HTH, THH.

### Give it a try!

A water tank is filled to its capacity of 132 gallons. Water is then drained from the tank through tap A and tap B at the rates of 18 gallons per minute and 20 gallons per minute, respectively. If tap B is turned on 1 minute after tap A, how long will it take to empty the tank?

#### Think

Make a table of the given information and input the data accordingly.

#### Solve

	0 min.	1 min.					
Tap A	0	18					
Tap B	0	0					
Total	0	18					

★ Answer It will take \_\_\_\_\_ minutes to empty the tank.

(Answer: 4)

## Practice: Make a List/Table

1. Destini has a 5¢, a 10¢, and a 50¢ stamp. Make a list to show the postage amounts she could have by using one or more stamps. How many different postage amounts could Destini have?



Think



Solve



Answer

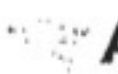
2. Oil is flowing into tanks X and Y at the rates of 25 gallons per minute and 35 gallons per minute, respectively. However, the tap for tank Y is turned on 2 minutes after the tap for tank X is turned on. How long does it take for tank Y to be filled with as much oil as tank X?



Think



Solve



Answer