Chapter 8: Functions

Read the following situations. Draw the input and output table, then solve the equation.

1. An automobile factory assembles 8 more motorcycles than cars every day.

   Let M represents the number of motorcycles and C represents the number of cars assembled. Given an equation M = C + 8, draw an input / output table as for C from 5 to 10.

Input (C)	Output (M)
5	13
6	
7	
8	
9	
10	

When C = 5,
M = C + 8
M = 5 + 8
M = 13

When C = 6,
M =
M =
M =

When C = 7,
M =
M =
M =

When C = 8,
M =
M =
M =

When C = 9,
M =
M =
M =

When C = 10,
M =
M =
M =

2. Alice is determined to become a singer. She practices 5 more hours than her teacher assigns.

   Let A represents the number of hours of practice assigned and C represents the number of hours of practice completed. Given an equation $C = A + 5$, draw an input / output table as for A is equal to 2, 4, 6, 8, 10 and 12 hours respectively.

3. A worker of a bakery shop cuts 1.5kg of cakes into 20 pieces.

    Let C represents the number of cakes and P represents the number of total pieces of cake. Give an equation P = 20C, draw an input / output table as for C is equal to 3, 7, 8, 12, 14 and 16 cakes respectively.

4. A snack food company packs 8 sweets in each box.
   Let B represents the number of boxes and S represents
   the number of sweets. Given an equation S = 8B, draw an
   input / output table as for B is equal to 9, 12, 15, 24, 33
   and 54 boxes respectively.

Read the following situation and form an equation.

1.
> A company has 20 employees who work all year round, and the company hires some part timers at the peak period. Let P represent the number of part timers and T represent the total number of employees.

Form an equation to show the total employees the company has during peak period.

2.
> Julia is dentist and has 5 appointments every day. Let D represent the number of days and A represents the total number of appointments.

Form an equation to represent the relationship between D and A.

Read the following situation and form an equation.

3.

> Kayden is an excellent typist, he can type 60 words per minute. Let M represent the number of minutes Kayden types and W represent the total number of words he typed.

Form an equation to show the relationship between W and M.

4.

> There are 4 tomato trees in Joe's garden, and he wants to plant more. It takes an hour for him to plant each tree. Let H represent the number of hour Joe spend planting and T represent the number of tomato trees he will have.

Form an equation to represent the relationship between D and A.