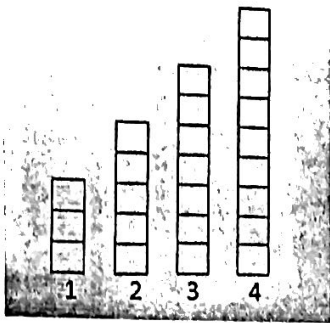
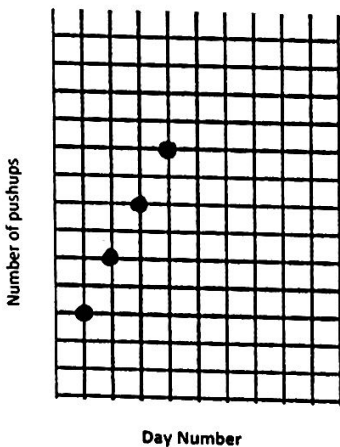


1.4 Scott's Workout



Day 1 shows Scott completed 3 pushups.

Day #	# of pushups
1	3
2	5
3	7
4	9
5	11



Recursive Equation:

$$f(n) = f(n-1) + 2$$

Explicit Equation:

$$y = 2x + 3 - 2$$

$$y = 2(x-1) + 3$$

$$y = 2x + 1$$

$$y = 2(3) + 1$$

$$y = 7$$

$$y = 2(3-1) + 3$$

$$y = 7$$

$$y = 2(3) + 3 - 2$$

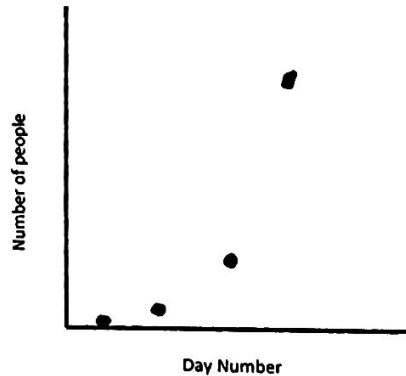
$$y = 6 + 3 - 2$$

$$y = 7$$

1.5 Don't Break the Chain

- Bill sends the e-mail to 8 of his friends on day 1
- Each those friends has to send the e-mail to 10 people
- On Day 2, 80 new people will see the e-mail

Day #	Expanded	# of People
1	8	8
2	8×10	80
3	$8 \times 10 \times 10$	800
4	$8 \times 10 \times 10 \times 10$	8000



Recursive Equation:

$$f(n) = f(n-1) \times 10$$

Explicit Equation:

$$y = 8 \times 10^{n-1}$$

How many people will receive the e-mail on day 7?

8,000,000