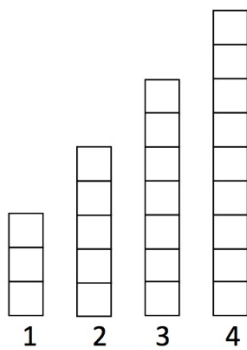


© 2012 www.flickr.com/photos/at_cadets



© 2012 www.flickr.com/photos/at_cadets

1. Copy the visual representation of the push-ups into your notebook and show how you see the growth from day to day on the visual.
2. How many push-ups will Scott do on day 10?
3. How many push-ups will Scott do on day n ?
4. Model the number of push-ups Scott will complete on any given day. Include both explicit and recursive equations.
5. Aly is also including push-ups in her workout and says she does more push-ups than Scott because she does fifteen push-ups every day. Is she correct? Explain.

Explicit - Rule to find any # of Pushups

$$P = 3 + 2(n-1)$$

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

$$Y = 2x + 1$$

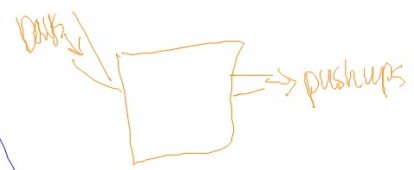
input days	output push-ups
1	$f(1) = 3$
2	$f(2) = 5$
3	$f(3) = 7$
4	$f(4) = 9$
10	$f(10) = 3 + 2(9) = 21$
n	$f(n) = 3 + 2(n-1)$
x	$f(x) = 2x + 1$

explicit
function

Write **Explicit Function**

input x Days	output y push ups
1	$f(1) = 3$
2	$f(2) = 5$
3	$f(3) = 7$
4	$f(4) = 9$
5	$f(5) = 11$
50	$f(50) = 3 + 2(49) = 101$
n	$f(n) = 3 + 2(n-1)$

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



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