

①

Find → $f(x) = 3x^2 - 4x$

$f(-3) = 3(-3)^2 - 4(-3)$

$f(-3) = 3(+9) - 4(-3)$

$f(-3) = 27 + +12$

$f(-3) = 39$

②

$$\begin{array}{r} -3x + 2 = 2x - 28 \\ -2x \qquad -2x \\ \hline -5x + 2 = -28 \\ \quad -2 \qquad -2 \\ \hline -5x = -30 \\ \quad -5 \qquad -5 \\ \hline x = 6 \end{array}$$

$$y = 2x - 3$$

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

$$y = 2 - 3$$

$$y = -1$$

x	y
1	-1
2	1
3	3
4	5
5	7

$$y = 2x - 3$$

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

$$y = 4 - 3$$

$$y = 1$$

$$x = 3 \quad y = 2x - 3$$

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

$$6 - 3 = 3$$

$$y = 2x - 3$$

$$f(x) = 2x - 3$$

$$f(1) = 2(1) - 3$$

$$= 2 - 3 = -1$$

$$f(2) = 2(2) - 3$$

$$4 - 3$$

$$f(3) = 2(3) - 3$$

$$6 - 3 = 3$$

x	f(x)
1	-1
2	1
3	3
4	5
5	7

$$g(x) = x^2 + 1$$

x	g(x)
0	1
1	2
2	5
3	10
4	17
5	26

$$0^2 + 1 = g(0)$$

$$1^2 + 1 = g(1)$$

$$2^2 + 1 = g(2)$$

$$3^2 + 1 = g(3)$$

$$\dots$$

$$3^2 = 3 \cdot 3$$

$$3^3 = 3 \cdot 3 \cdot 3$$

$$3^4 = 3 \cdot 3 \cdot 3 \cdot 3$$

$$y = 2x + 1 \quad f(x) = 2x + 1$$

$$y = 3x + 2 \quad g(x) = 3x + 2$$

$$\textcircled{1} \quad f(x) = 3x^2 - 4x$$

find $f(-3)$

$$-3^2 = -3 \cdot -3$$

$$f(x) = 3x^2 - 4x$$

$$f(-3) = 3(-3)^2 - 4(-3)$$

$$f(-3) = 3(+9) - 4(-3)$$

$$f(-3) = 27 + +12$$

$$\textcircled{f(-3) = 39}$$

$\textcircled{2}$

$$-3x + 2 = 2x - 28$$

$$\begin{array}{r} -3x + 2 = 2x - 28 \\ -2x \qquad -2x \\ \hline \end{array}$$

$$-5x + 2 = -28$$

$$\begin{array}{r} -5x + 2 = -28 \\ +2 \qquad -2 \\ \hline \end{array}$$

$$\begin{array}{r} -5x = -30 \\ \hline -5 \qquad -5 \end{array}$$

$$\textcircled{x = 6}$$

x	y
1	-1
2	1
3	3
4	5
5	7
6	9

$$y = 2x - 3$$

fill out the table

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

$$y = 2 - 3 = -1$$

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

$$y = 4 - 3 = 1$$

x	$f(x)$
1	-1
2	1
3	3
4	5
5	7
6	9

$$f(x) = 2x - 3$$

$$f(1) = 2(1) - 3$$

$$f(1) = 2 - 3 = -1$$

$$f(2) = 2(2) - 3$$

$$f(2) = 4 - 3 = 1$$

$$f(3) = 2(3) - 3$$

$$6 - 3 = 3$$

x	$g(x)$
1	2
2	5
4	17
7	50
0	1
3	10

$$\underline{g(x)} = x^2 + 1$$

$$g(1) = (1)^2 + 1 = 2$$

$$g(2) = (2)^2 + 1 = 5$$

$$g(4) = (4)^2 + 1 = 17$$

$$+ 1 = 10$$

$$\textcircled{1} \quad f(x) = 3x^2 - 4x$$

$$f(-3) = 3(-3)^2 - 4(-3)$$

$$f(-3) = 3(+9) - 4(-3)$$

$$f(-3) = 27 - -12$$

$$\textcircled{f(-3) = 39}$$

Solve for x

$$\begin{array}{r} -3x + 2 = 2x - 28 \\ -2x \qquad \qquad -2x \\ \hline -5x + 2 = -28 \\ \quad \quad \quad -2 \qquad \quad -2 \\ \hline \end{array}$$

$$\textcircled{x = 6} \quad \frac{-5x}{-5} = \frac{-30}{-5}$$

functions in a table

* Fill in the table

x	y
1	-1
2	1
3	3
4	5
5	7
6	9

$$y = 2x - 3$$

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

$$y = -1$$

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

$$y = 1$$

x	f(x)
1	-1
2	1
3	3
4	5
5	7
6	9

$$f(x) = 2x - 3$$

$$y = 2x - 3$$

$$f(1) = 2(1) - 3$$

$$f(1) = -1$$

$$f(2) = 2(2) - 3$$

$$4 - 3 = 1$$

$$f(3) = 2(3) - 3$$

$$6 - 3$$

$$3$$

X	g(x)
3	10
4	17
5	26
6	37
7	50

$$g(x) = x^2 + 1$$

$$g(3) = (3)^2 + 1$$

$$g(3) = 10$$

$$g(4) = (4)^2 + 1$$

$$g(4) = 17$$



①

$$f(x) = 3x^2 - 4x$$

$$f(-3) = 3(-3)^2 - 4(-3)$$

$$f(-3) = 3(+9) - 4(-3)$$

$$f(-3) = 27 + + 12$$

$$f(-3) = 39$$

②

Solve for x

$$\begin{array}{r} -3x + 2 = 2x - 28 \\ \underline{-2x} \quad \downarrow \quad \underline{-2x} \\ -5x + 2 = -28 \\ \underline{-2} \quad \underline{-2} \\ -5x = -30 \\ \underline{-5} \quad \underline{-5} \\ x = 6 \end{array}$$

x	y
1	-1
2	1
3	3
4	5
5	7
6	9

$$y = 2x - 3$$

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

$$y = 2 - 3$$

$$y = -1$$

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

$$y = 4 - 3 = 1$$

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

$$6 - 3 = 3$$

x	f(x)
1	-1
2	1
3	3
4	5
5	7
6	9

$$f(x) = 2x - 3$$

$$f(1) = 2(1) - 3$$

$$f(1) = 2 - 3$$

$$f(1) = -1$$

$$f(2) = 2(2) - 3$$

$$f(2) = 4 - 3$$

$$f(2) = 1$$

$$\dots$$

$$f(x) = 2x - 3$$

$$f(2) = 1$$

$$f(x) = 1$$

$$1 = 2x - 3$$

$$+4 \quad +4$$

$$\frac{5}{2} = \frac{2x}{2}$$

$$x = 5/2$$

x	$g(x)$
3	10
4	17
5	26
6	37
7	50
8	65

$$g(x) = x^2 + 1$$

* Fill in the table

$$g(3) = (3)^2 + 1$$

$$g(4) = (4)^2 + 1$$

$$g(5) = (5)^2 + 1$$

$$g(6) = (6)^2 + 1$$

$$g(7) = (7)^2 + 1$$

$$g(8) = (8)^2 + 1$$

NLMB