

Thursday 7 September

## 1.1 LEARNING TARGET & DO NOW

Learning Target: I can read and interpret table data

- Do Now: Is the point  $(2, 4)$  on the line

$$y = 4x - 2$$

- *Calculator check*
- Homework: Khan practice problems [link](#)
- **Exit note: Jumprope survey (Google Classroom)**

1. In the  $xy$ -plane, the point  $(3, 5)$  lies on the graph of the function  $f$ . If  $f(x) = x^2 + a$ , where  $a$  is a constant, what is the value of  $a$ ?

1. In the  $xy$ -plane, the point  $(3, 5)$  lies on the graph of the function  $f$ . If  $f(x) = x^2 + a$ , where  $a$  is a constant, what is the value of  $a$ ?

- Solution:

- $f(3) = 3^2 + a = 5$

- $a = 5 - 9 = -4$

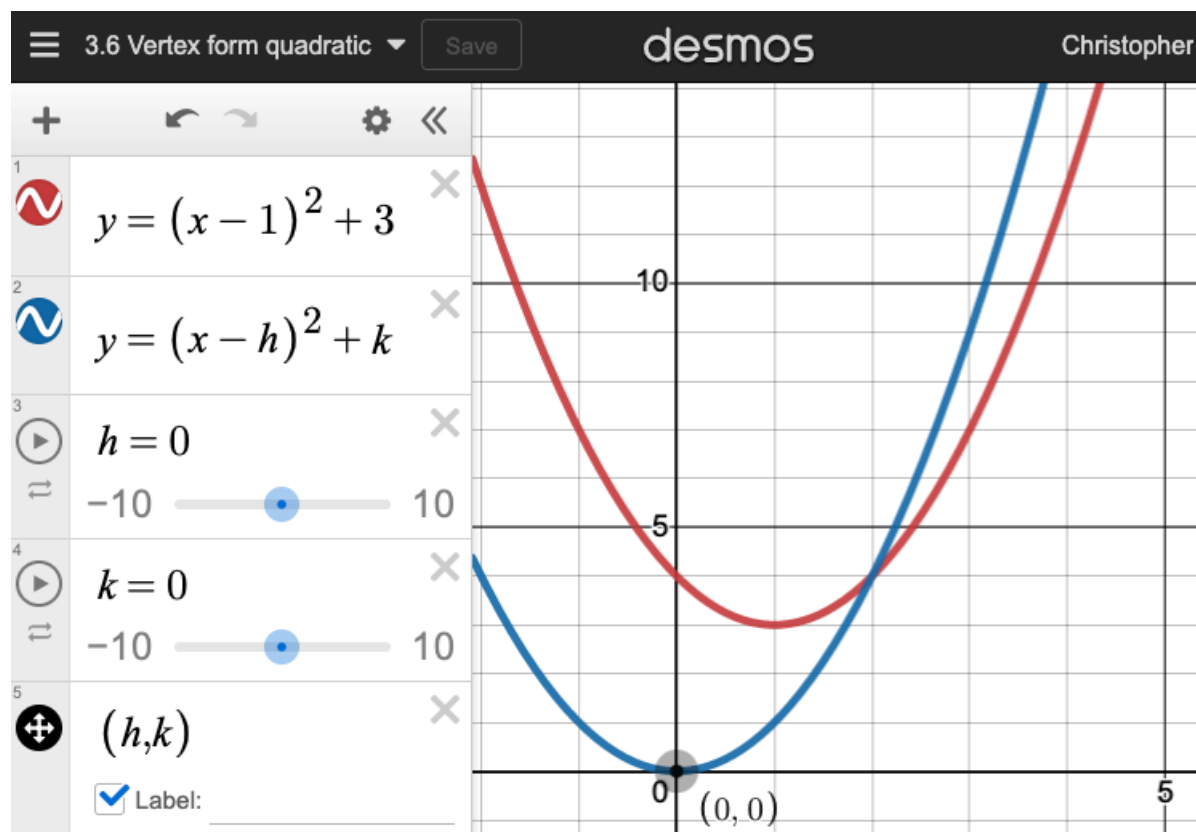
2. A football club is planning a new field. The length of the field will be 40 yards longer than the width. If the area of the field is to be 2100 square yards, what will be the field's dimensions?

Solution:

$$\begin{aligned}x(x + 40) &= 2100 \\x^2 + 40x - 2100 &= 0 \\(x - 40)(x + 70) &= 0 \\x &= 40, -70\end{aligned}$$

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

Use this [Desmos link](#) to graph  $y = (x - h)^2 + k$



# TOP OF SLIDE

|                    | Bought pints | Did not buy pints | Total |
|--------------------|--------------|-------------------|-------|
| Bought scoops      | 27           | 283               | 310   |
| Did not buy scoops | 45           | 3                 | 48    |
| Total              | 73           | 286               | 358   |

- left justify
- not centered

