

Think Break #6: Answer

- **$f(x,y) = 7 + 5x + 2y - 5x^2 - 4y^2 - 11xy$**
- $f_x(x,y) = 5 - 10x - 11y$
- $f_y(x,y) = 2 - 8y - 11x$
- $f_{xx}(x,y) = -10$, $f_{yy}(x,y) = -8$, $f_{xy}(x,y) = -11$
- **$f(x,y) = -5 - 2x + y - x^2 - 3y^2 + 2xy$**
- $f_x(x,y) = -2 - 2x + 2y$
- $f_y(x,y) = 1 - 6y + 2x$
- $f_{xx}(x,y) = -2$, $f_{yy}(x,y) = -6$, $f_{yy}(x,y) = 2$