

1. Take  $V = \langle -2, 6 \rangle$ . Calculate  $-3V$  and  $\frac{1}{2}V$ .
2. Take  $V = \langle -2, 6 \rangle$ . Calculate the length of  $V$ ,  $-3V$  and  $\frac{1}{2}V$ .
3. Take  $V = \langle -2, 6 \rangle$ . Write its polar form.
4. Find the equation of the circle of radius 3 centered at  $(-1, 4)$ .

5. Find the projection of  $(-1, 4)$  onto the unit circle.
6. Write  $g(x) = -2(x - 1)^2 + 1$  as a composite function using  $\text{pow}_2$ . Use a graphing tool to verify your answer.
7. Write  $g(x) = 3(5x + 1)^3$  as a composite function using  $\text{pow}_3$ . Use a graphing tool to verify your answer.