

Math C

12.1 Circles part 4 - KEY

State the domain & range of a circle given in general form.

1. Domain:  $[-2, 0]$   
Range:  $[-2, 0]$

2. Domain:  $[-4 - \sqrt{15}, -4 + \sqrt{15}]$   
Range:  $[-2 - \sqrt{15}, -2 + \sqrt{15}]$

3. Domain:  $[1 - \sqrt{10}, 1 + \sqrt{10}]$   
Range:  $[-3 - \sqrt{10}, -3 + \sqrt{10}]$

4. Domain:  $[-2 - \sqrt{30}, -2 + \sqrt{30}]$   
Range:  $[6 - \sqrt{30}, 6 + \sqrt{30}]$

5. Domain:  $[-6 - 2\sqrt{31}, -6 + 2\sqrt{31}]$   
Range:  $[-2\sqrt{31}, 2\sqrt{31}]$

6. Domain:  $[\frac{1}{3} - \sqrt{\frac{34}{3}}, \frac{1}{3} + \sqrt{\frac{34}{3}}]$   
Range:  $[-\frac{1}{3} - \sqrt{\frac{34}{3}}, -\frac{1}{3} + \sqrt{\frac{34}{3}}]$