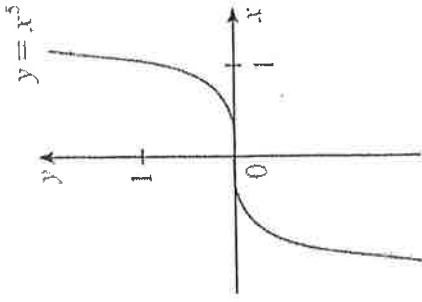
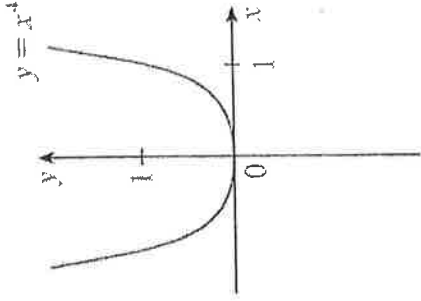
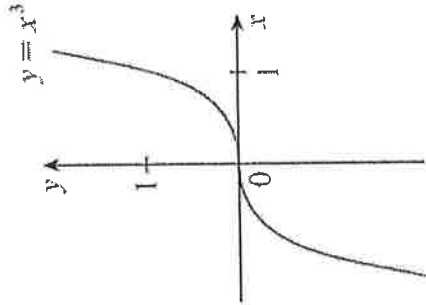
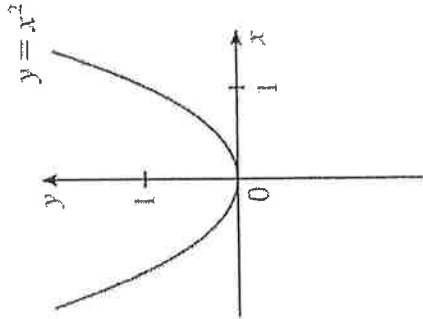
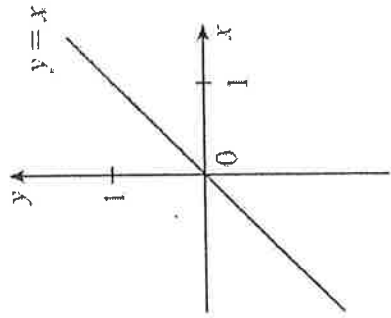


Properties of Power Functions, $f(x) = x^n$, n is a Positive Even Integer

1. f is an even function, so its graph is symmetric with respect to the y -axis.
2. The domain is the set of all real numbers. The range is the set of non-negative real numbers.
3. The graph always contains the points $(-1, 1)$, $(0, 0)$, and $(1, 1)$.
4. As the exponent n increases in magnitude, the graph becomes more vertical when $x < -1$ or $x > 1$; but for x near the origin, the graph tends to flatten out and lie closer to the x -axis.



Properties of Power Functions, $f(x) = x^n$, n is a Positive Odd Integer

1. f is an odd function, so its graph is symmetric with respect to the origin.
2. The domain and the range are the set of all real numbers.
3. The graph always contains the points $(-1, -1)$, $(0, 0)$, and $(1, 1)$.
4. As the exponent n increases in magnitude, the graph becomes more vertical when $x < -1$ or $x > 1$; but for x near the origin, the graph tends to flatten out and lie closer to the x -axis.

