Name: _____     Date: _____

## Section 1.4 Investigate

**Part A**
**Step 2**

| Value of $c$ in $y = a[k(x - d)]^n + c$ | Effect on the Graph of $y = x^n$ |
| --- | --- |
| $c > 0$ | |
| $c < 0$ | |

| Value of $d$ in $y = a[k(x - d)]^n + c$ | Effect on the Graph of $y = x^n$ |
| --- | --- |
| $d > 0$ | |
| $d < 0$ | |

**Part B**
**Step 3**

| Value of $a$ in $y = a[k(x - d)]^n + c$ | Effect on the Graph of $y = x^n$ |
| --- | --- |
| $a > 1$ | |
| $0 < a < 1$ | |
| $-1 < a < 0$ | |
| $a < 1$ | |

| Value of $k$ in $y = a[k(x - d)]^n + c$ | Effect on the Graph of $y = x^n$ |
| --- | --- |
| $k > 1$ | |
| $0 < k < 1$ | |
| $-1 < k < 0$ | |
| $k < -1$ | |