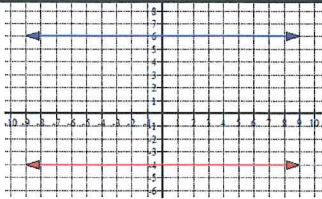
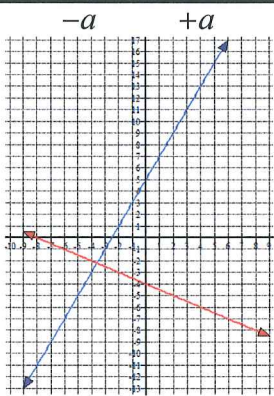
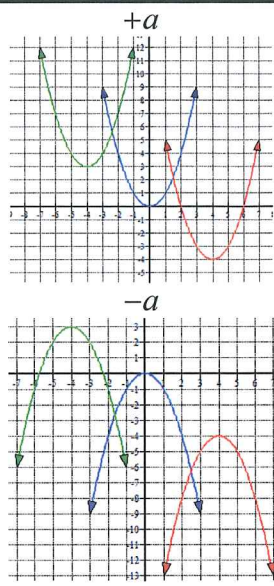
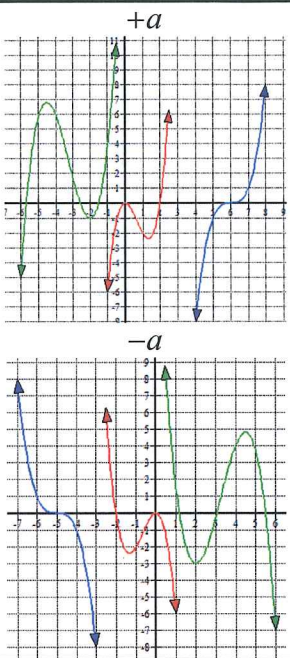


| Type of Function | Constant $y = x^0 + C$ | Linear $y = ax + C \rightarrow$ $y = ax^0 + C$ | Quadratic $y = ax^2 + bx + C$ | Cubic $y = ax^3 + bx^2 + cx + C$ |
|---------------------------|--|--|--|--|
| |  |  |  |  |
| Degree, n | 0, zero | 1 | 2 | 3 |
| End Behaviour | If constant is positive \rightarrow Quadrant II to I If constant is negative \rightarrow Quadrant III to IV | If leading coefficient is positive \rightarrow Quadrant III to I If leading coefficient is negative \rightarrow Quadrant II to IV | If leading coefficient is positive \rightarrow Quadrant II to I If leading coefficient is negative \rightarrow Quadrant III to IV | If leading coefficient is positive \rightarrow Quadrant III to I If leading coefficient is negative \rightarrow Quadrant II to IV |
| Number of x -intercepts | 0 unless the constant functions lies on the y -axis, then all points are the x -intercepts | 1 | 0, 1, or 2 | 1, 2, or 3 |
| Number of y -intercepts | 1 | 1 | 1 | 1 |
| Number of turning points | 0 | 0 | 1 | 0 or 2 |
| Domain | $\{x \mid x \in R\}$ | $\{x \mid x \in R\}$ | $\{x \mid x \in R\}$ | $\{x \mid x \in R\}$ |
| Range | $\{y \mid y = C, y \in R\}$ | $\{y \mid y \in R\}$ | $\{y \mid y \geq \text{vertex}, y \in R\}$ or $\{y \mid y \leq \text{vertex}, y \in R\}$ | $\{y \mid y \in R\}$ |