

Vocab Booklet

Intercepts of a graph: Where a graph crosses an axis.

x-int:

- Where a graph crosses the x-axis.
- Values of x that make $y = 0$.
- To find x-int you replace y with zero and solve for x.
- A function can have:
 - no x-int
 - one x-int
 - many x-int

y-int:

- Where a graph crosses the y-axis.
- Values of y that make $x = 0$.
- To find y-int you replace x with zero and solve for y.
- A function can have:
 - At most 1 y-intercept.

Linear Family of Functions:

Example Equation: $y = -2x + 5$

Parent Function: $y = x$

| X | Y |
|----|---|
| -2 | 9 |
| -1 | 7 |
| 0 | 5 |
| 1 | 3 |
| 2 | 1 |

Intercepts:

x-int:

$$-5/-2 = 5/2$$

$$0 = -2x + 5$$

Make y=0 then solve for x.

y-int:

$$5$$

Make x=0 the find y.

$$y = -2x + 5$$

$$y = x$$

$$0$$

Make y=0 then solve for x.

$$0$$

Make x=0 the find y.