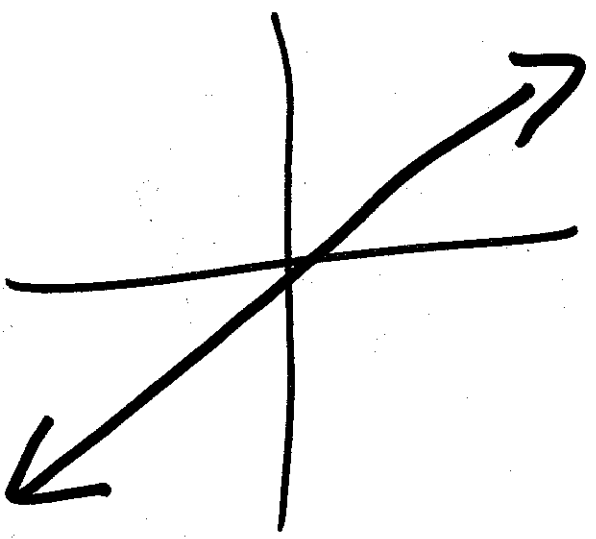


linear

$$y = mx + b$$

$$y = 2x - 3$$

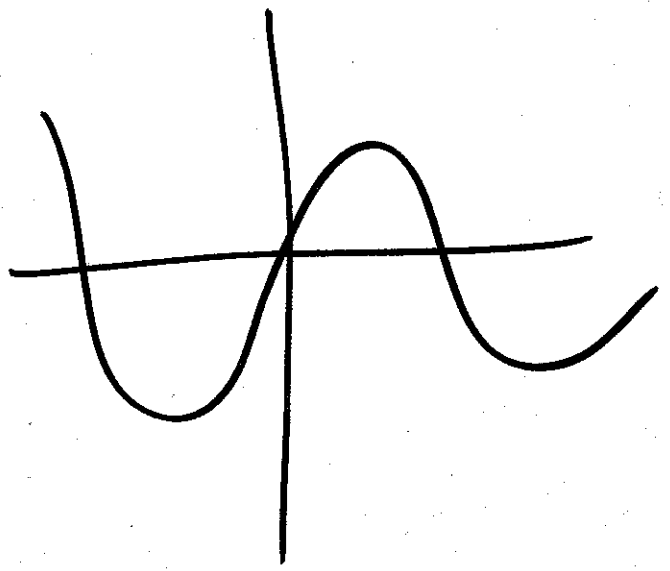


x	y
1 < 0	4 > +4
1 < 1	8 > +4
1 < 2	12 > +4
1 < 3	16 > +4
x	4x + 4

non-linear

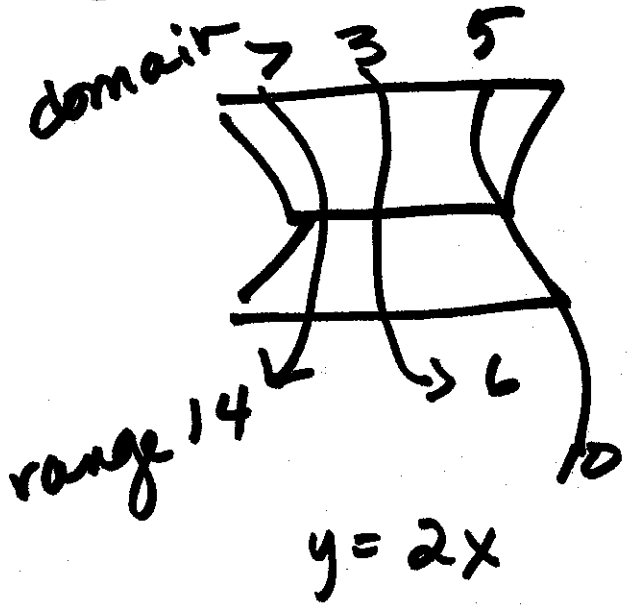
$$y = x^2 - 1$$

$$y = \frac{1}{x}$$



x	y
1 < 0	7 > 8
1 < 1	15 > 25
1 < 2	40 > 25

function

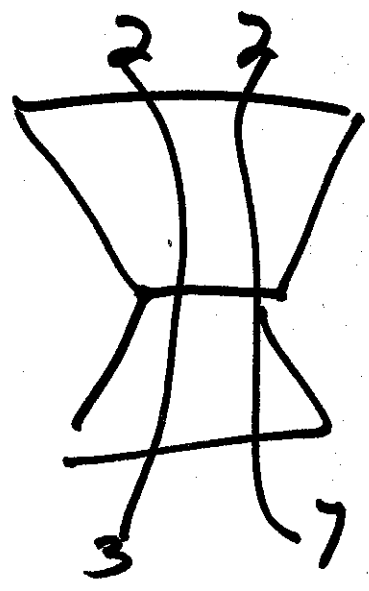


1-1 relationship

- (2, 3)
- (3, 4)
- (100, 101)
- (x, x+1)

x	-10	-7	-1	4
y	18	16	24	18

non-function



- (2, 3)
- (5, 7)
- (5, 9)
- (5, 12)

x	-10	-7	-1	-1
y	18	16	18	17