

$$1.3 \quad \begin{matrix} (t, N) \\ (5, 1200) \end{matrix}$$

$$31. \quad N = 50t + b$$

$$1200 = 50(5) + b$$

$$1200 = 250 + b$$

$$\begin{array}{r} -250 \\ -250 \end{array}$$

$$950 = b$$

$$1990 \quad t=0$$

$$1995 \quad t=5$$

$$N = 50t + 950$$

$$2010 \quad t=20$$

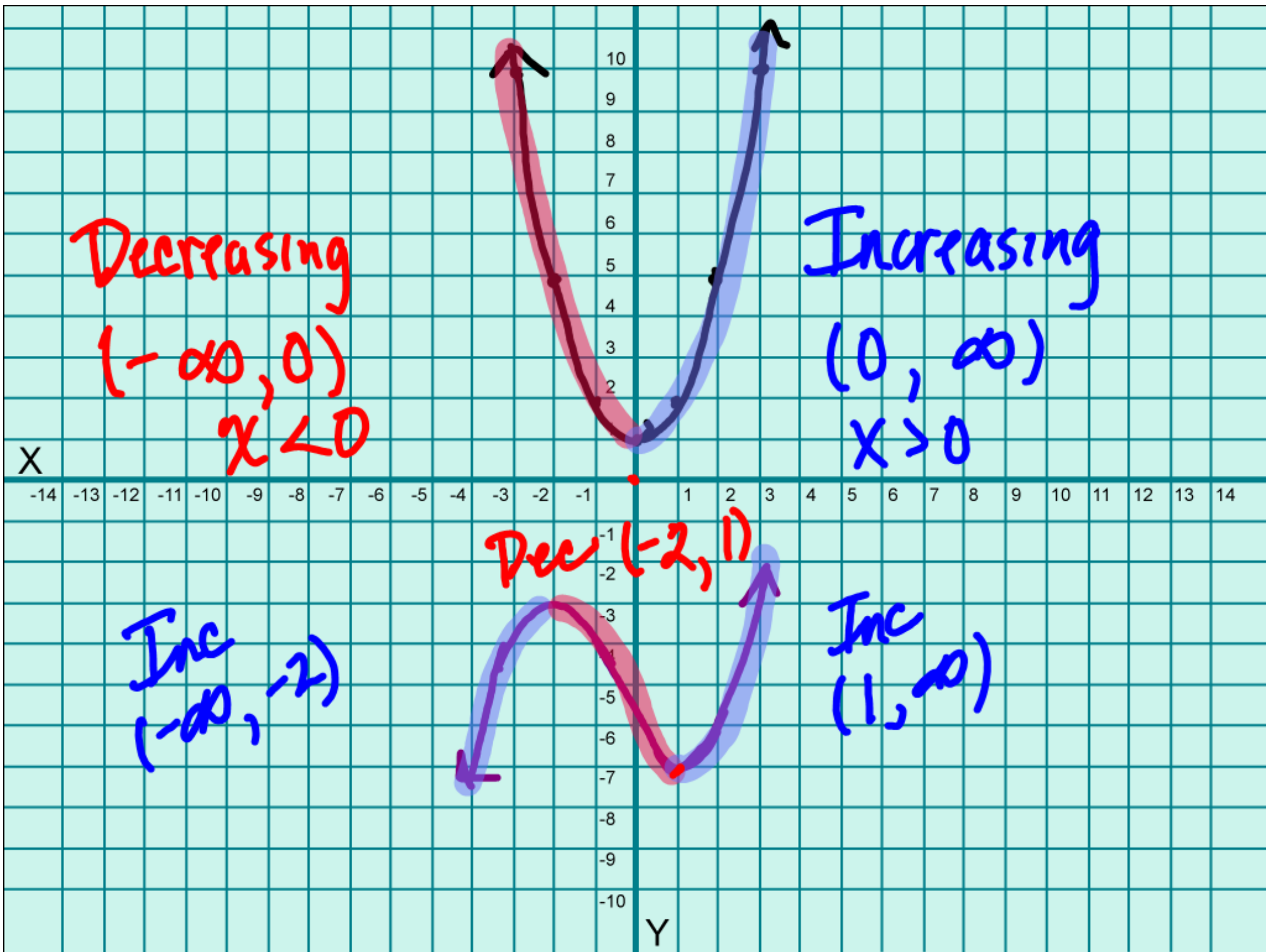
$$N = 50(20) + 950$$

$$N = 1950$$

$$x^2 + y^2 = 4$$

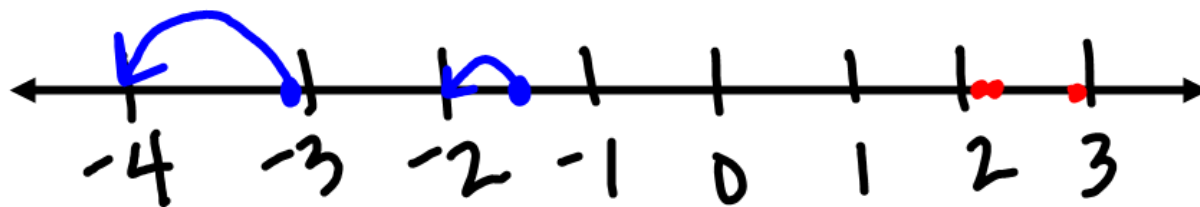
x	y
0	2
0	-2

$$\begin{aligned}0^2 + y^2 &= 4 \\ \sqrt{y^2} &= \sqrt{4} \\ y &= \pm 2\end{aligned}$$



Greatest Integer Function

Integer \leq Value



$$[[2.1]] = 2$$

$$[[3]] = 3$$

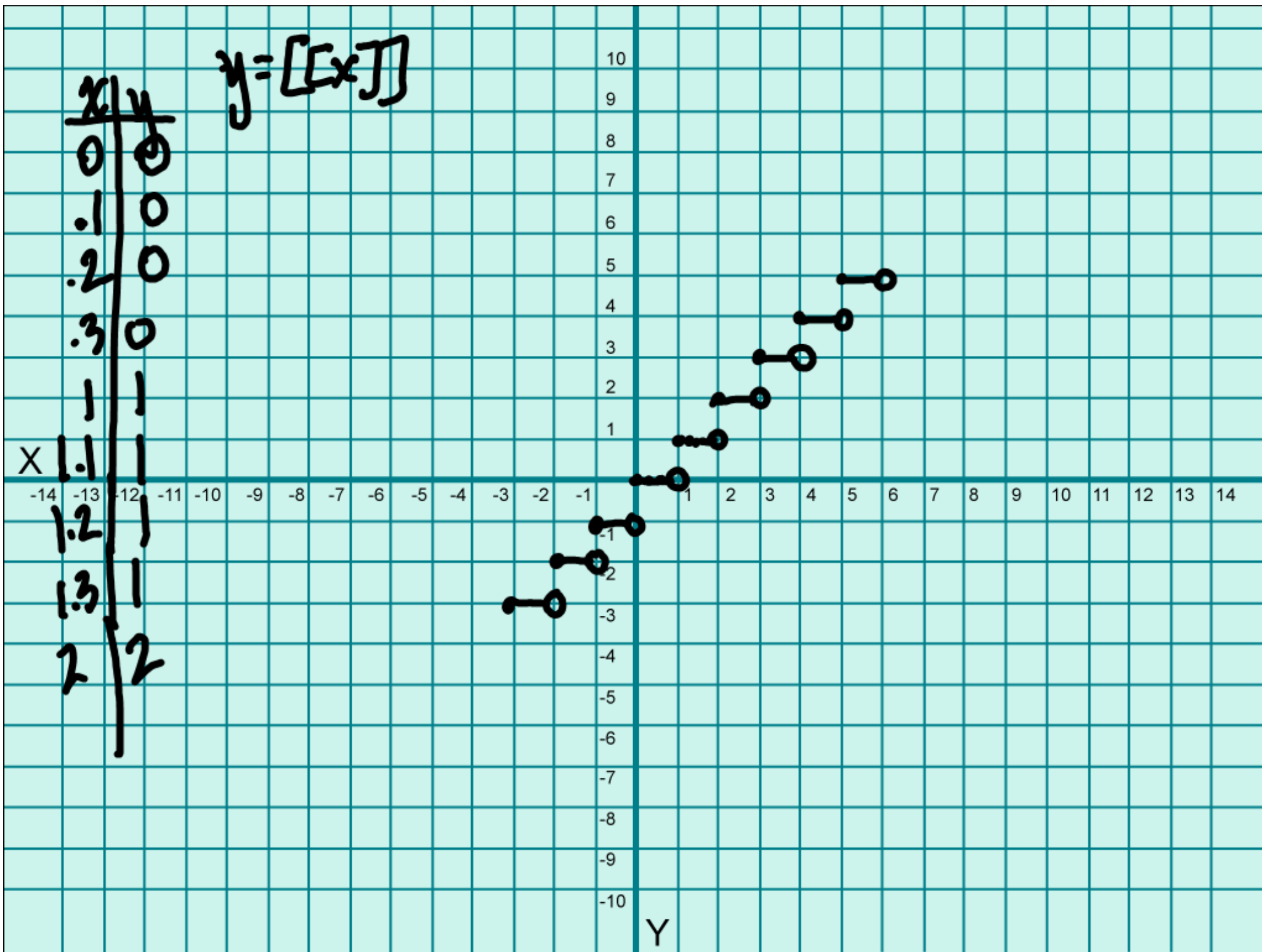
$$[[2.2]] = 2$$

$$[[-1.5]] = -2$$

$$[[2.9]] = 2$$

$$[[-3.1]] = -4$$

$$y = [[x]]$$



$$(x-h)^2 + (y-k)^2 = r^2$$
$$x^2 + y^2 = 4$$

X

-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14



Y

Even $f(x) = f(-x)$

$$f(x) = x^2 + 5 \leftarrow \text{Same}$$

$$f(-x) = (-x)^2 + 5$$

$$f(-x) = x^2 + 5 \leftarrow$$

$$f(x) = x^3 + 3x \leftarrow$$

$$f(-x) = (-x)^3 + 3(-x)$$

$$f(-x) = -x^3 - 3x \leftarrow$$

Not
Even

Even Function
Symmetric about the y-axis

Odd $f(-x) = -f(x)$

$$f(x) = 2x^2 - 4$$

$$f(-x) = 2(-x)^2 - 4$$

$$f(-x) = 2x^2 - 4$$

$$-f(x) = -2x^2 + 4$$

Not
Odd

$$f(x) = x^3$$

$$f(-x) = (-x)^3$$

$$f(-x) = -x^3$$

$$-f(x) = -x^3$$

Not
even

Same
Odd

1.6 Vertical Translation

$$y = x^2$$

