

22 73 1, 5, 29, 33, 43, 49, 61, 65, 71

① (4, 4) (0, 6)

§ 1.6

$$m = \frac{6-4}{0-4} = \frac{2}{-4}$$

$$y = -2x + b$$

$$6 = 0 + b$$

$$6 = b$$

$$y = -2x + 6$$

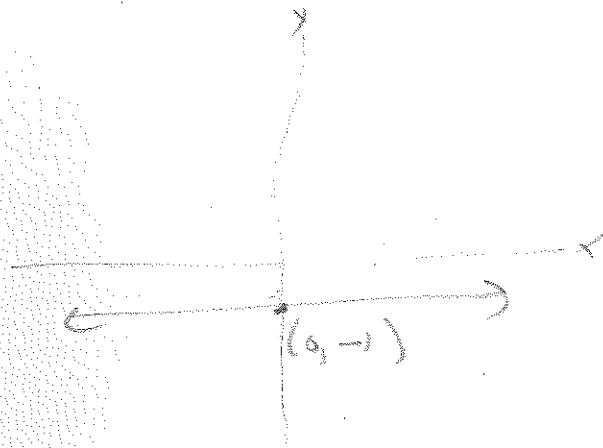


⑤ (-5, -1)

(5, -1)

$$m = \frac{-1 - (-1)}{-5 - 5} = 0$$

$$y = -1$$



29 a) $\lfloor -2.1 \rfloor = -2$

b) $\lfloor 2.9 \rfloor = 2$

c) $\lfloor -3.1 \rfloor = -4$

d) $\lfloor \frac{7}{2} \rfloor = \lfloor 3.5 \rfloor = 3$

33 $h(x) = \lfloor 3x - 1 \rfloor$

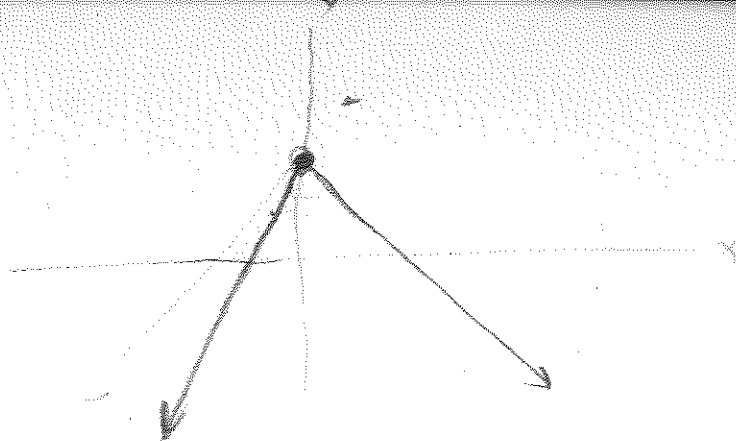
a) $h(2.5) = \lfloor 3(2.5) - 1 \rfloor = \lfloor 7.5 - 1 \rfloor = \lfloor 6.5 \rfloor = 6$

b) $h(-3.2) = \lfloor 3(-3.2) - 1 \rfloor = \lfloor -9.6 - 1 \rfloor = \lfloor -10.6 \rfloor = -11$

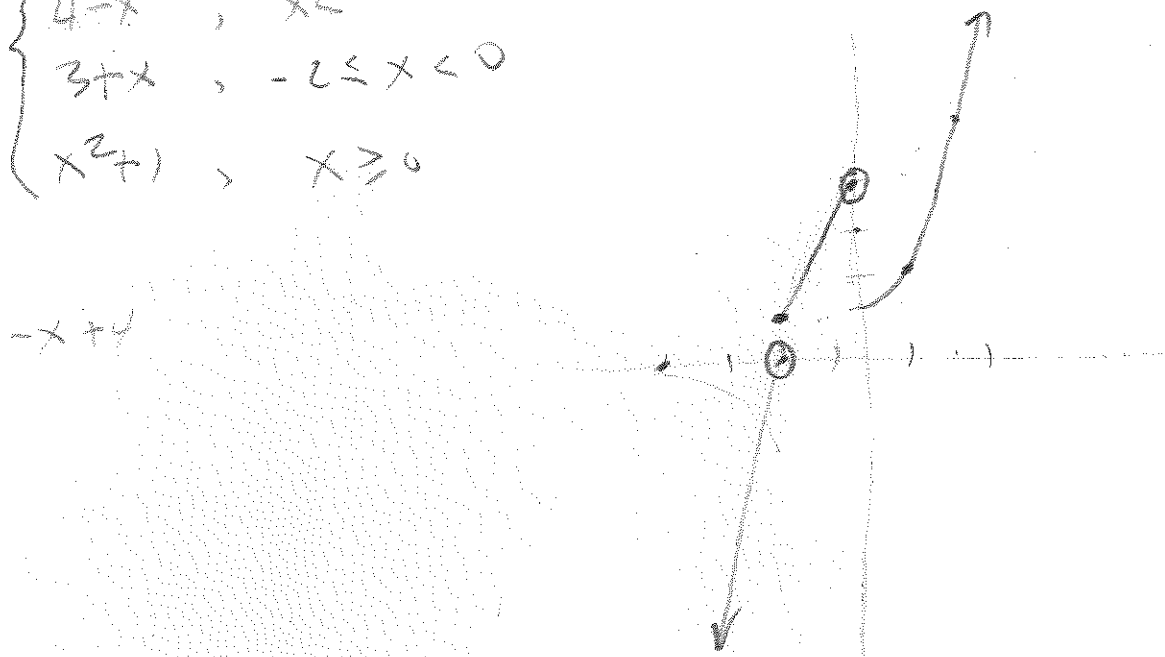
c) $h(\frac{7}{3}) = \lfloor 3(\frac{7}{3}) - 1 \rfloor = \lfloor 6 \rfloor = 6$

d) $h(-\frac{21}{3}) = \lfloor -21 - 1 \rfloor = \lfloor -22 \rfloor = -22$

$$43) f(x) = \begin{cases} 2x+3, & x < 0 \\ 3-x, & x \geq 0 \end{cases}$$



$$49) h(x) = \begin{cases} 4-x^2, & x < -2 \\ 3+x, & -2 \leq x < 0 \\ x^2+1, & x \geq 0 \end{cases}$$



$$\begin{aligned} 61b) C &= .6 - .42[-12.5] \\ &= .6 - .42[-11.5] \\ &= .6 - .42(-12) \\ &= .6 - (-5.04) = \$5.64 \end{aligned}$$

$$65) w(h) = \begin{cases} 12h & , 0 < h \leq 40 \\ 18(h-40) + 480 & , h > 40 \end{cases}$$

$$a) w(30) = 12(30) = 360$$

$$w(40) = 12(40) = 480$$

$$w(45) = 18(5) + 480 = 90 + 480 = 570$$

$$w(50) = 18(10) + 480 = 660$$

$$b) w(h) = \begin{cases} 12h & , 0 \leq h \leq 45 \\ 18(h-45) + 540 & , h > 45 \end{cases}$$

$$71) f(x) = \begin{cases} -\frac{4}{3}x + 6 & , 0 \leq x \leq 3 \\ -\frac{2}{5}x + \frac{16}{5} & , 3 < x \leq 8 \end{cases}$$

$$6 = \frac{4}{3}(0) + b$$

$$6 = b$$

$$0 = -\frac{2}{5}(8) + b$$

$$\frac{16}{5} = b$$