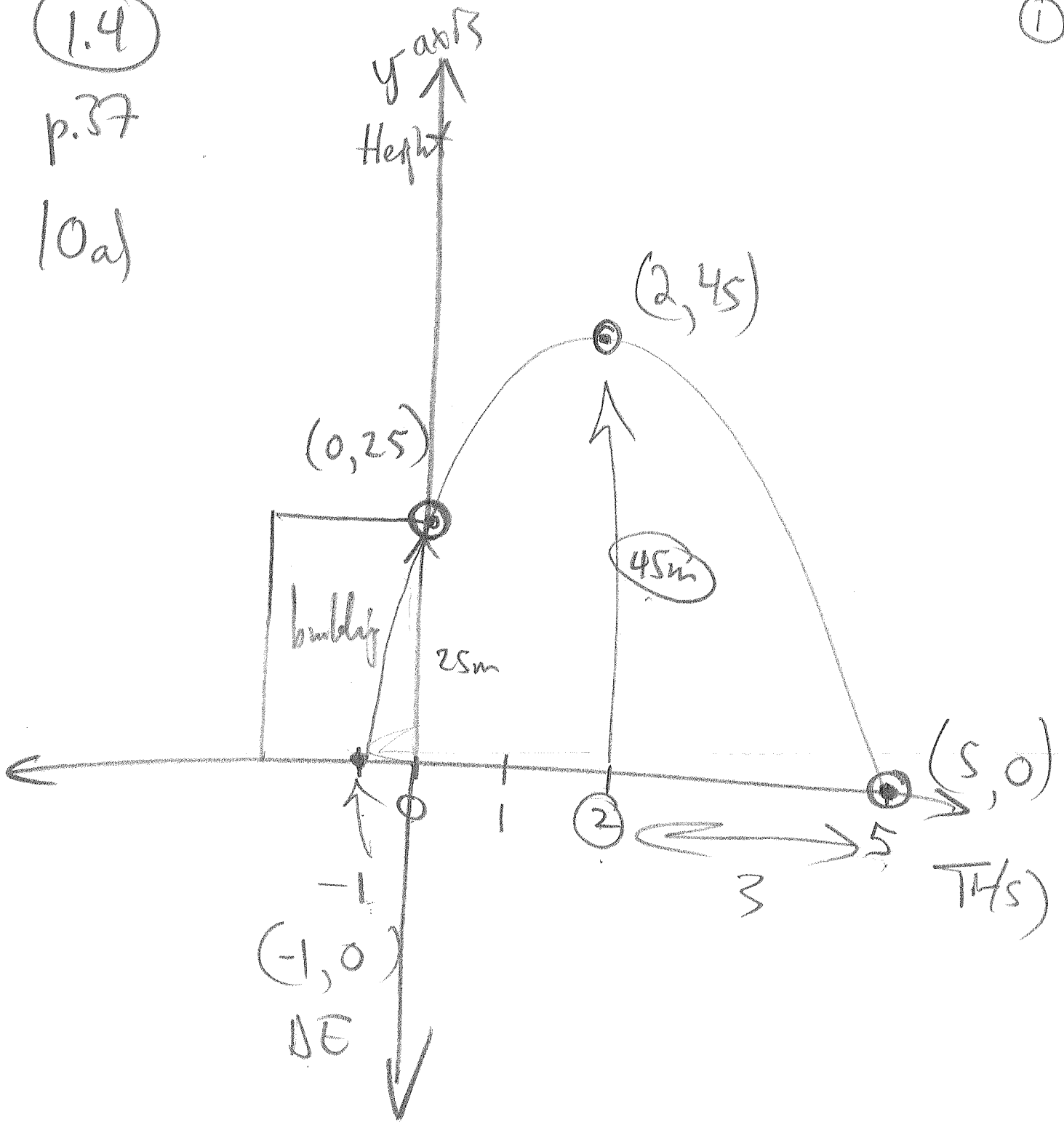


1.4

p.37

10a)

1



b) $D\{0 \leq x \leq 5\}$

$R\{0 \leq y \leq 45\}$

p37 #10 continue

②

c) $f(x) = ax^2 + bx + c$

✓ $f(x) = a(x-h)^2 + k$

✓ $f(x) = a(x-r)(x-s)$

use the roots $(-1, 0)$ and $(5, 0)$

$$f(x) = a(x - (-1))(x - 5)$$

$$f(x) = a(x + 1)(x - 5)$$

use $(0, 25)$ and solve for a .

$$f(0) = 25 = a(0 + 1)(0 - 5)$$

$$25 = a(-5)$$

$$\frac{25}{-5} = \frac{-5a}{-5}$$

$$a = -5$$

$$V(2, 45)$$

$$\therefore f(x) = -5(x - 2)^2 + 45$$