

2-1 Standardized Test Prep

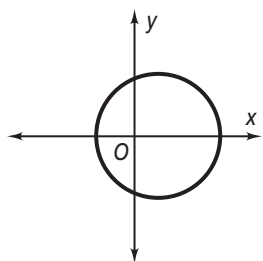
Relations and Functions

Multiple Choice

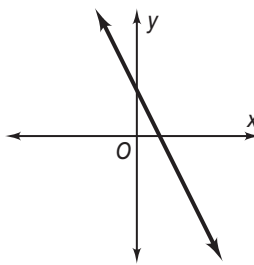
For Exercises 1–4, choose the correct letter.

1. Which relations are functions?

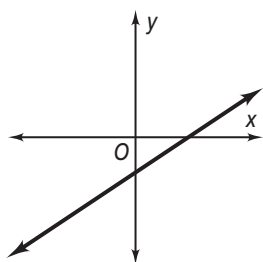
I.



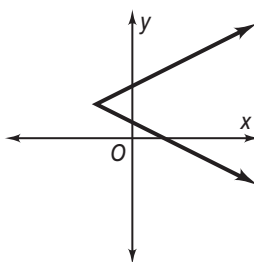
III.



II.



IV.



(A) II and III

(B) I and II

(C) III and IV

(D) I and IV

2. Which point could not be part of a function that includes $(3, -1)$, $(4, 2)$, $(5, 4)$, $(-2, 0)$, and $(8, -3)$?

(F) $(6, -7)$

(G) $(3, -2)$

(H) $(7, 4)$

(I) $(2, 2)$

3. For the function $f(x) = -4x - 3$, which of the following is $f(-2)$?

(A) -11

(B) -2

(C) 5

(D) 11

4. What is the domain of the relation given by the ordered pairs?

$(2, -1)$, $(-4, 1)$, $(-2, -1)$, $(3, -3)$, $(2, 3)$

(F) $\{-3, -2, 1, 3\}$

(G) $\{-4, -2, 2, 3\}$

(H) $\{-3, -1, 1, 3\}$

(I) $\{-4, -1, 1, 3\}$

Short Response

5. A phone store employee earns a salary of \$450 per week plus 10% commission on her weekly sales.

a. What function rule models the employee's weekly earnings?

b. If the employee earned \$570 in a week, what was the amount of her sales for that week?