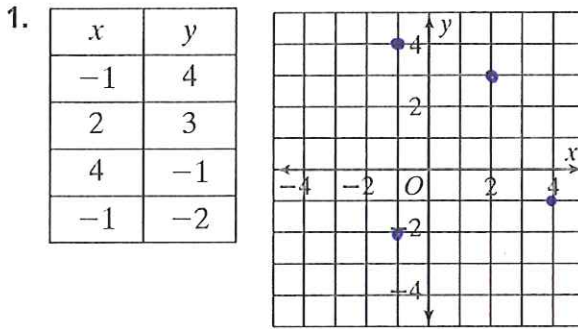


Practice 8-1

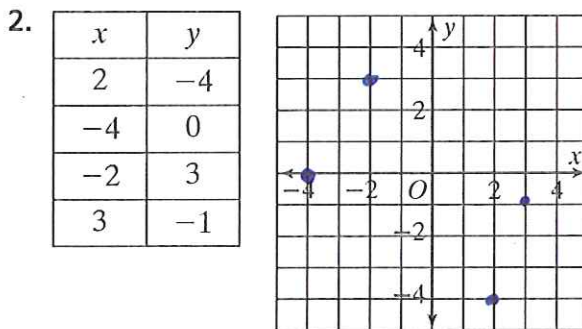
Relations and Functions

VLT = Vertical Line Test

Graph each relation. Is the relation a function? Explain.



No.
It fails the VLT.



Yes
It Passes the VLT.

For each relation, list the members of the domain. List the members of the range. Is the relation a function? Explain.

3. $\{(7, -2), (8, -2), (-5, 7), (-9, 1)\}$
 Domain: $\{-9, -5, 7, 8\}$ Range: $\{-2, 1, 7\}$

Function? Yes ; it passes the VLT

4. $\{(-8, 0), (10, 6), (10, -2), (-5, 7)\}$
 Domain: $\{-8, -5, 10\}$ Range: $\{-2, 0, 6, 7\}$

Function? No ; it fails the VLT

5. $\{(9.2, 4.7), (-3.6, 4.8), (5.2, 4.7)\}$
 Domain: $\{-3.6, 5.2, 9.2\}$ Range: $\{4.7, 4.8\}$

Function? Yes ; it passes the VLT

6. Is the time it takes you to run a 100-meter race a function of the speed you run? Explain.

Yes → there is 1 time for each speed.