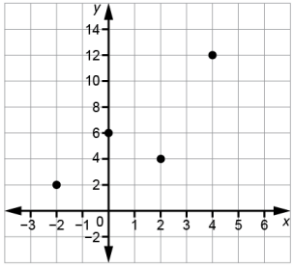
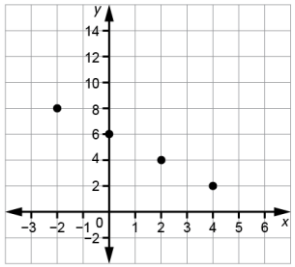
Patterns and Relations

Activity 4 Assessment

Determining if a Relation is Linear

Determining if a Relation is Linear

Determines from a graph whether a relation is linear	Determines whether a relation given as a table of values, set of ordered pairs, or equation is linear by graphing it	Determines whether a relation is linear without graphing	Adjusts or adds to a graph, table of values, or set of ordered pairs to make it represent a linear relation
 The points on the graph do not lie along a line, so the relation is not linear.	I graphed the points (–2, 8), (0, 6), (2, 4), and (4, 2). They all lie along a line, so the relation is linear. 	The *x*-values increase by 1 each time. The *y*-values decrease by 3 most of the time, but not in all cases. So, the relation is not linear.	I changed the *y*-value for $x = 1$ from 5 to 6. Then the *y*-values decrease by 3 each time so the relation is linear.

x	*y*
–1	12
0	9
1	5
2	3
3	0

x	*y*
–1	12
0	9
1	6
2	3
3	0

Observations/Documentation