Linear or nonlinear — From a table of values

Name: _____ Date: _____

Could each table's points lie on a straight line? Circle one.

1

x	9	15	21	27
y	103	163	223	283

Linear / Nonlinear

2

x	5	9	13	17
y	105	165	225	285

Linear / Nonlinear

3

x	3	7	11	15
y	63	111	159	207

Linear / Nonlinear

4

x	3	6	9	12
y	13	40	85	148

Linear / Nonlinear

5

x	3	6	9	12
y	23	77	167	293

Linear / Nonlinear

6

x	3	6	9	12
y	22	76	166	292

Linear / Nonlinear

Linear or nonlinear · From a table of values — Answer key

1. x: 9, 15, 21, 27 y: 103, 163, 223, 283: Linear — x goes up by 6 every time and y goes up by 60 every time

2. x: 5, 9, 13, 17 y: 105, 165, 225, 285: Linear — x goes up by 4 every time and y goes up by 60 every time

3. x: 3, 7, 11, 15 y: 63, 111, 159, 207: Linear — x goes up by 4 every time and y goes up by 48 every time

4. x: 3, 6, 9, 12 y: 13, 40, 85, 148: Nonlinear — x goes up by 3 every time, but the steps in y are 27, 45, 63 — they change, so the points do not lie on a line

5. x: 3, 6, 9, 12 y: 23, 77, 167, 293: Nonlinear — x goes up by 3 every time, but the steps in y are 54, 90, 126 — they change, so the points do not lie on a line

6. x: 3, 6, 9, 12 y: 22, 76, 166, 292: Nonlinear — x goes up by 3 every time, but the steps in y are 54, 90, 126 — they change, so the points do not lie on a line