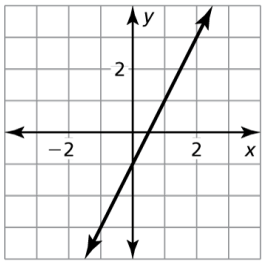
Name_____ Date _____

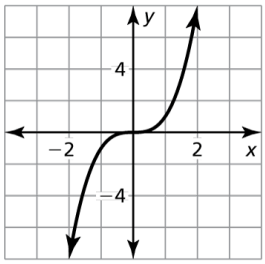
3.2 Practice A

In Exercises 1 and 2, determine whether the graph represents a *linear* or *nonlinear* function. Explain.

1.



2.



In Exercises 3 and 4, determine whether the table represents a *linear* or *nonlinear* function. Explain.

3.

x	0	1	2	3
y	3	5	7	9

4.

x	1	4	7	10
y	2	5	6	10

In Exercises 5–8, determine whether the equation represents a *linear* or *nonlinear* function. Explain.

5. $y = \sqrt{x} + 5$

6. $y = 4x - 2$

7. $y = 9 - x$

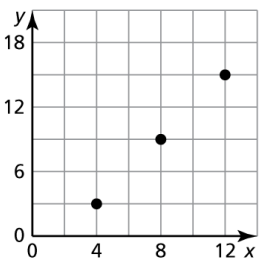
8. $y = (x - 1)(x + 7)$

9. Fill in the table so it represents a linear function.

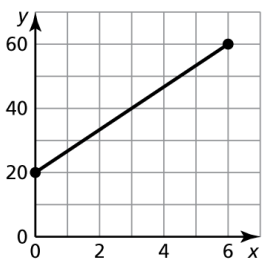
x	4	8	12	16	20
y	−4				12

In Exercises 10 and 11, find the domain of the function represented by the graph. Determine whether the domain is *discrete* or *continuous*. Explain.

10.



11.

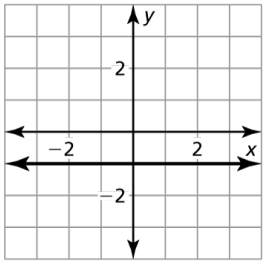


Name _____ Date _____

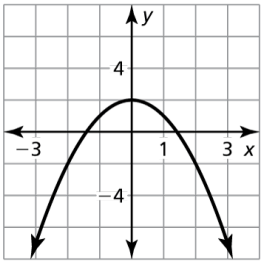
3.2 Practice B

In Exercises 1 and 2, determine whether the graph represents a *linear* or *nonlinear* function. Explain.

1.



2.



In Exercises 3 and 4, determine whether the table represents a *linear* or *nonlinear* function. Explain.

3.

x	0	2	4	6
y	3	9	27	81

4.

x	14	24	34	44
y	24	20	16	12

In Exercises 5–8, determine whether the equation represents a *linear* or *nonlinear* function. Explain.

5. $y - \frac{1}{3}x = 4x - 7$

6. $6 - \frac{2}{5}x = 3y + 8x$

7. $(y + 2)(y - 4) = 3x$

8. $4x - 5y + 2xy = 0$

In Exercises 9 and 10, determine whether the domain is *discrete* or *continuous*.

9.

Input **Months, *x***	1	2	3
Output **Height of basil plant (inches), *y***	3	7	11

10.

Input **Tickets, *x***	10	20	30
Output **Cost (dollars), *y***	60	120	180