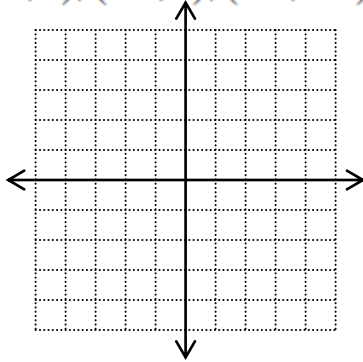


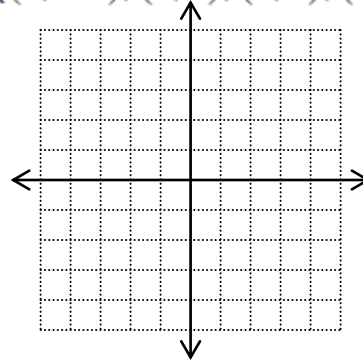
Relations, Functions, and Writing a Function Rule (PH ALG2 2-1)

Graph each relation.

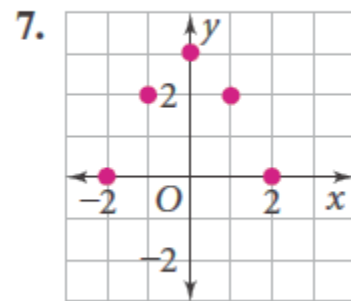
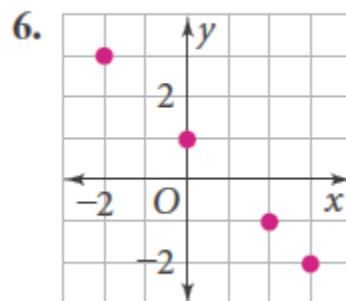
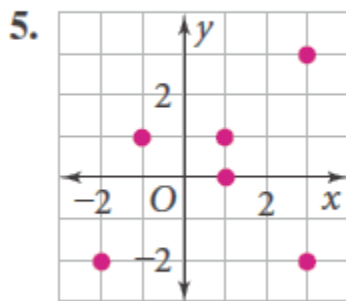
1. $\{(-1, 3), (-2, 1), (-3, -3), (-4, -5)\}$



2. $\{(0, -2), (2, 0), (3, 1), (5, 3)\}$



Write the ordered pairs for each relation. Find the domain and range.



Determine if the relation is a function. State the Domain and the Range.

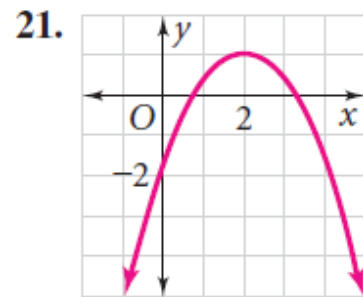
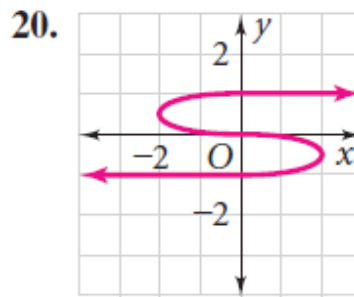
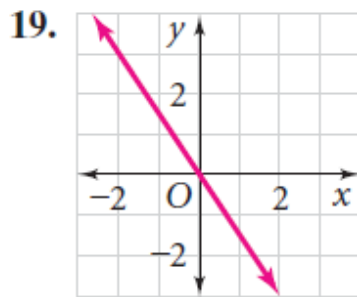
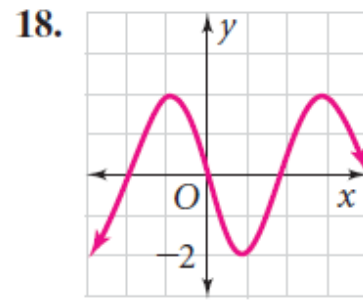
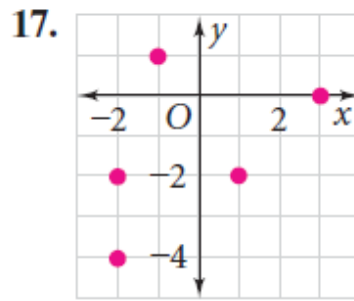
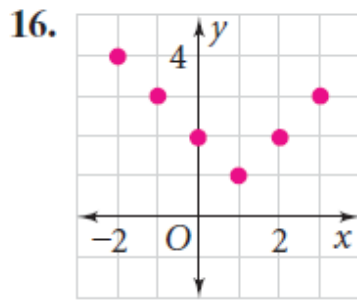
10. $\{(-\frac{1}{2}, 11), (0, 10), (\frac{1}{2}, 5), (1, 12)\}$

11. $\{(5, 10), (10, 5), (15, 20), (20, 15)\}$

12. $\{(1, -2), (-2, 0), (-1, 2), (1, 3)\}$

13. $\{(1, 1), (2, 2), (3, 5), (4, 10), (5, 15)\}$

Use the vertical-line test to determine if the relation is a function. State the domain and range.



For each function, find $f(-5)$, $f(-3)$, $f(\frac{1}{2})$, and $f(4)$.

22. $f(a) = 2a + 3$

26. $f(d) = 1 - 4d$

31. **Measurement** One meter equals about 39.37 in. Write a function rule for converting inches to meters. Evaluate the function for 59 in.

Write a rule/equation for each table.

32)

X	f(x)
2	-1
3	0
4	1
5	2

33)

x	G(x)
0	0
4	2
9	3
16	4

34)

q	P(q)
1	-2
5	-10
10	-20
15	-30