EXERCISES

Given the domain of each function, find the range.

1. $f(x)=x+2$, D = {0, 1, 2, 3, 4}
2. $f(x)=x-2$, D = {0, 1, 2, 3, 4}
3. $f(x)=2x+1$, D = {0, 1, 2, 3, 4}
4. $f(x)=2x-1$, D = {0, 1, 2, 3, 4}
5. $f(x)=x+5$, D = {–2, –1, 0, 1, 2}
6. $f(x)=x-5$, D = {–2, –1, 0, 1, 2}
7. $f(x)=2x-3$, D = {–3, –1, 0, 2, 4}
8. $f(x)=3x-1$, D = {–4, –2, 3, 5, 6}
9. $f(x)=x^2+2$, D = {–2, –1, 0, 2, 3}
10. $f(x)=|x|-1$, D = {–2, –1, 0, 2, 3}

Find the domain and range of each relation (ordered pairs). Determine whether or not it is a function.

11. {(0, 1), (1, 3), (2, 4), (3, 6)}
12. {(–2, 3), {–1, 1), (2, 3), (3, 5)}
13. {(–3, 1), (–2, 1), (3, 3), (3, 4)}
14. {(–4, 2), (–1, 1), (0, 2), (4, 3)}
15. {(1, 3), (3, 4), (1, 5), (3, 7)}
16. {(5, 1), (3, 4), (4, 3), (5, 5)}
17. {(5, 7), (–6, 3), (4, 8), (–7, 2)}
18. {(2, 1), (2, –1), (3, –2), (3, 2)}
19. {(1, 0), (0, 1), (1, 3), (2, 1), (3, 4)}
20. {(0, 1), (1, 3), (2, 5), (4, 6), (3, 5)}

21. Find the domain and range of the equation $y=2x-1$.
22. Find the domain and range of the equation $|y|=x-2$.
23. The following points represent the relation between x and y. Is the relation a function ? Explain. {(–3, 1), (–1, 2), (0, 3), (2, 5), (3, 7)}
24. The following points represent the relation between x and y. Is the relation a function ? Explain. {(–5, 2), (–2, 0), (–5, –1), (3, 1), (2, 0)}
25. Does the equation $y=2x-2$ determine y is a function of x ? Explain.
26. Does the equation $y^2=2x-2$ determine y is a function of x ? Explain.
27. Does the equation $|y|=x+1$ determine y is a function of x ? Explain.
28. Does the equation $y=|x|+1$ determine y is a function of x ? Explain.
29. John drives at a speed of 60 miles per hour. Write a function for distance (d) as a function of the number of hours (h).
30. A-Plus Company charges $19.50 per copy of book and $2.50 for a handling fee per order. Write a function for the total cost (c) per order as a function of the number of books (n).

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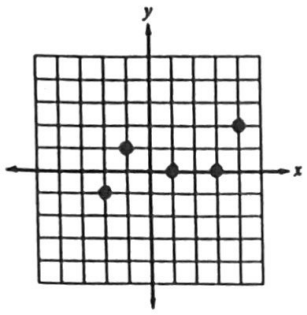
Given the graph of each relation between x and y. Is the relation a function ?

31.



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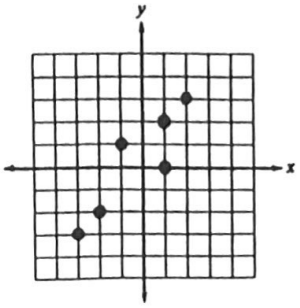

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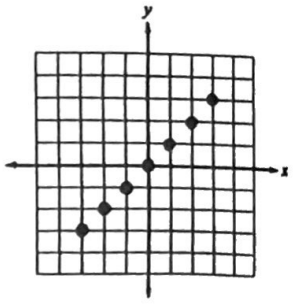

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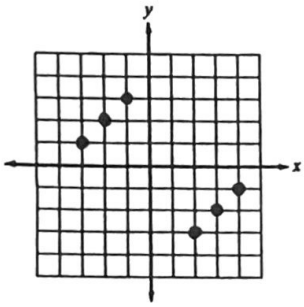

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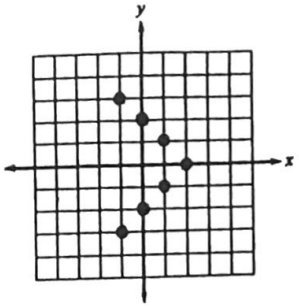

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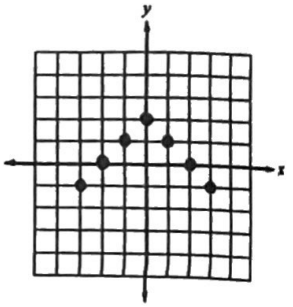

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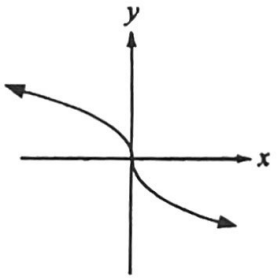

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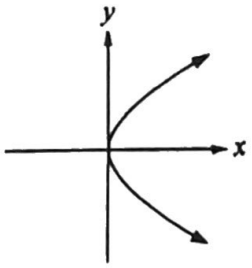

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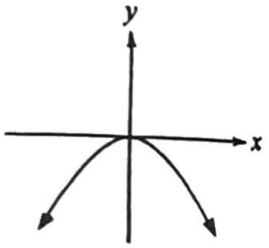

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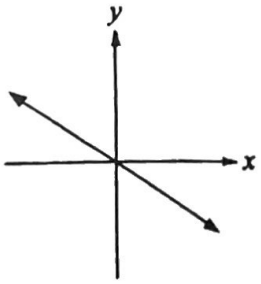

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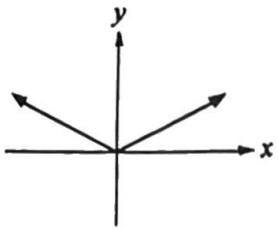

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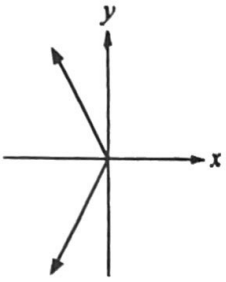

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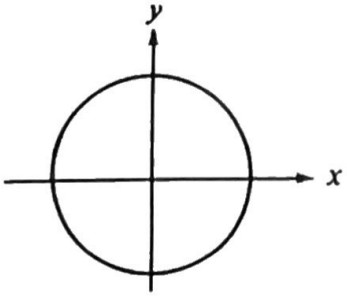

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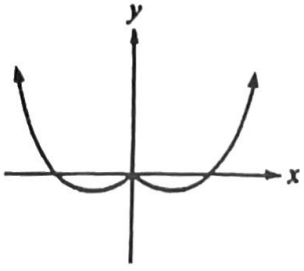

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