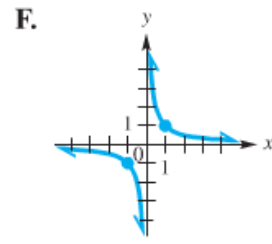
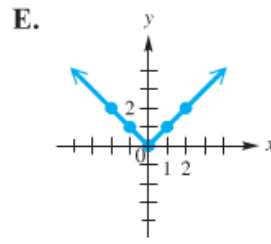
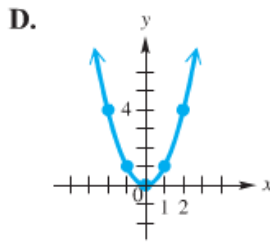
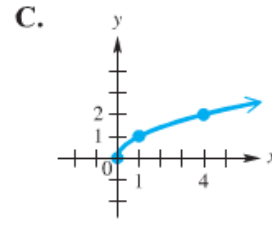
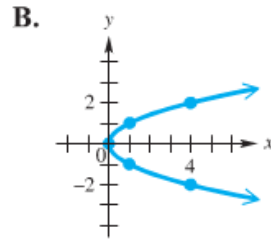
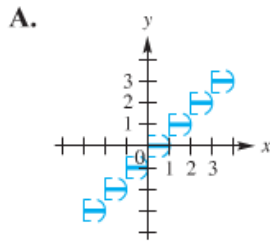


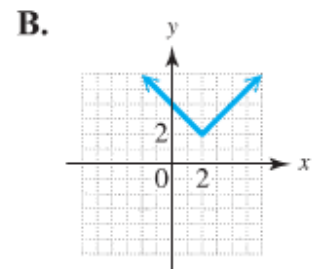
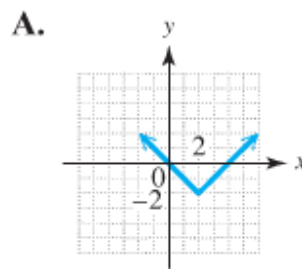
1. Refer to the following graphs.



- Which is the graph of $f(x) = |x|$? The lowest point on its graph has coordinates (____, ____).
- Which is the graph of $f(x) = x^2$? Give the domain and range.
- Which is the graph of $f(x) = \llbracket x \rrbracket$? Give the domain and range.
- Which is the graph of $f(x) = \sqrt{x}$? Give the domain and range.
- Which is not the graph of a function? Why?
- Which is the graph of $f(x) = \frac{1}{x}$? The lines with equations $x = 0$ and $y = 0$ are called its _____.

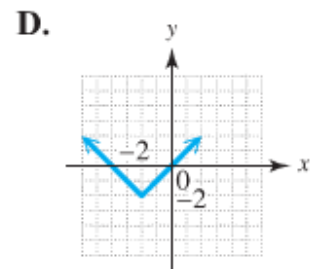
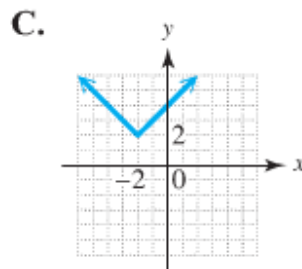
2. Without plotting points, match each function defined by the absolute value expression with its graph.

a) $f(x) = |x - 2| + 2$



b) $f(x) = |x + 2| + 2$

c) $f(x) = |x - 2| - 2$



d) $f(x) = |x + 2| - 2$

3. Evaluate each expression.

a) $\llbracket 1.9 \rrbracket$

b) $\llbracket -1.9 \rrbracket$

c) $\llbracket 2.53 \rrbracket$

d) $\llbracket -1 \rrbracket$

4. Graph each function. Give the domain and range.

a) $f(x) = -|x + 3|$

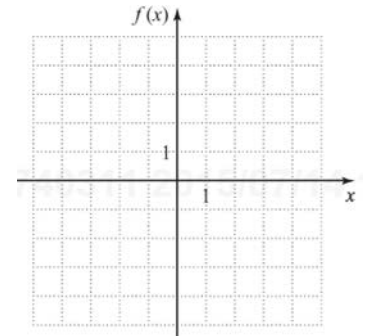
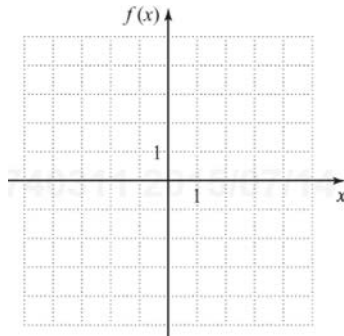
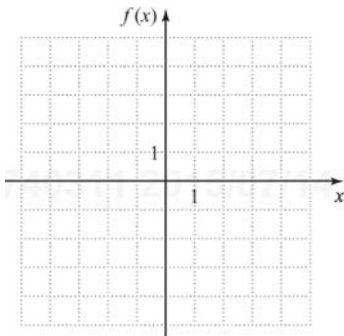
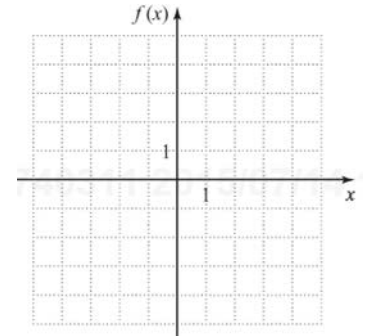
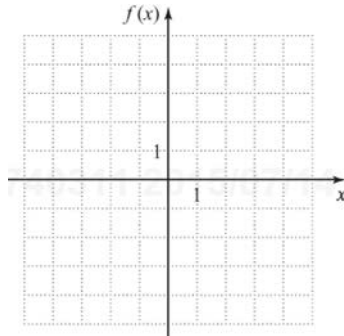
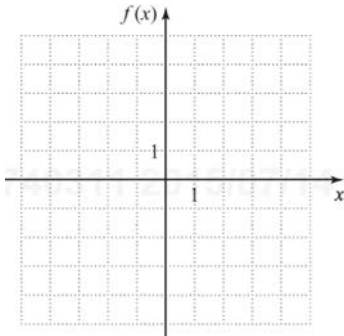
b) $f(x) = \frac{1}{x-1} + 2$

c) $f(x) = \sqrt{x - 2} + 1$

d) $f(x) = \llbracket x \rrbracket - 2$

e) $f(x) = \llbracket x - 2 \rrbracket$

f) $f(x) = 2 - |x + 1|$



5. A certain long-distance carrier provides service between Podunk and Nowhereville. If x represents the number of minutes for the call, where $x > 0$, then the function f defined by $f(x) = 0.40\llbracket x \rrbracket + 0.75$ gives the total cost of the call in dollars. Find the cost of a 5.5-minute call.