16. Solve the quadratic equation below. Then, choose the intervals that the solutions belong to, with $x_1 \leq x_2$ (if they exist).

$$13x^2 + 12x - 9 = 0$$

A. $x_1 \in [-0.85, 1.28]$ and $x_2 \in [0.86, 1.61]$

B. $x_1 \in [-18.62, -17.78]$ and $x_2 \in [6.26, 6.58]$

C. $x_1 \in [-25.5, -25.01]$ and $x_2 \in [23.54, 24.9]$

D. $x_1 \in [-2.73, -0.95]$ and $x_2 \in [0.09, 0.74]$

E. There are no Real solutions.

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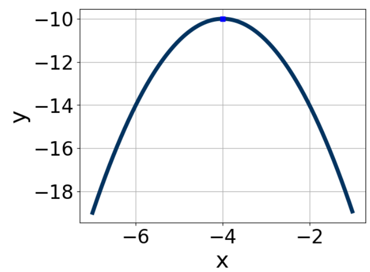
17. Write the equation of the graph presented below in the form $f(x) = ax^2 + bx + c$, assuming $a = 1$ or $a = -1$. Then, choose the intervals that $a, b,$ and c belong to.



A. $a \in [0.2, 2.3], \quad b \in [-11, -6], \text{ and } \quad c \in [4, 7]$

B. $a \in [-1.6, -0.5], \quad b \in [6, 10], \text{ and } \quad c \in [-9, -5]$

C. $a \in [-1.6, -0.5], \quad b \in [6, 10], \text{ and } \quad c \in [-31, -25]$

D. $a \in [0.2, 2.3], \quad b \in [6, 10], \text{ and } \quad c \in [4, 7]$

E. $a \in [-1.6, -0.5], \quad b \in [-11, -6], \text{ and } \quad c \in [-31, -25]$

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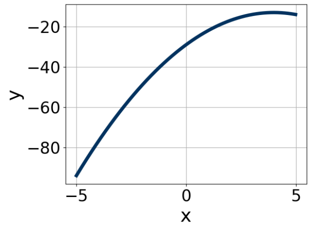
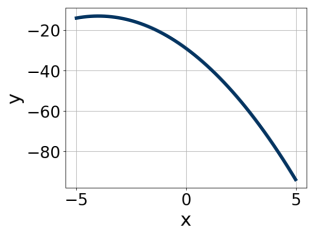
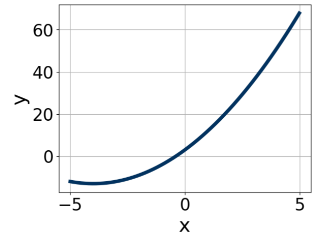
18. Graph the equation $f(x) = -(x - 4)^2 - 13$.



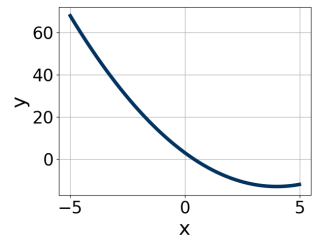
A.



B.



C.



D.

E. None of the above

19. Factor the quadratic below. Then, choose the intervals that contain the constants in the form $(ax+b)(cx+d); b \leq d$.

$$24x^2 - 2x - 15$$

A. $a \in [2.66, 4.02], \quad b \in [-9, 0], \quad c \in [7.52, 8.83], \text{ and } \quad d \in [-4, 6]$

B. $a \in [5.07, 6.12], \quad b \in [-9, 0], \quad c \in [3.64, 4.39], \text{ and } \quad d \in [-4, 6]$

C. $a \in [0.06, 2.18], \quad b \in [-29, -14], \quad c \in [0.78, 1.42], \text{ and } \quad d \in [13, 20]$

D. $a \in [11.88, 13.69], \quad b \in [-9, 0], \quad c \in [1.56, 2.67], \text{ and } \quad d \in [-4, 6]$

E. None of the above.

20. Solve the quadratic equation below. Then, choose the intervals that the solutions x_1 and x_2 belong to, with $x_1 \leq x_2$.

$$15x^2 - 38x + 24 = 0$$

A. $x_1 \in [0.58, 0.65]$ and $x_2 \in [2.55, 2.94]$

B. $x_1 \in [0.34, 0.53]$ and $x_2 \in [3.71, 4.29]$

C. $x_1 \in [0.62, 0.76]$ and $x_2 \in [2.21, 2.45]$

D. $x_1 \in [1.16, 1.23]$ and $x_2 \in [1.25, 1.34]$

E. $x_1 \in [17.94, 18.02]$ and $x_2 \in [19.67, 20.03]$