16. 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.

\[
\begin{align*}
a &= 1 \\
b &= -8 \\
c &= 6
\end{align*}
\]

A. \( a \in [0.4, 1.9], \ b \in [7, 9], \) and \( c \in [24, 29] \)
B. \( a \in [0.4, 1.9], \ b \in [-13, -7], \) and \( c \in [24, 29] \)
C. \( a \in [0, 3], \ b \in [7, 9], \) and \( c \in [5, 7] \)
D. \( a \in [0.4, 1.9], \ b \in [-13, -7], \) and \( c \in [5, 7] \)
E. \( a \in [-2.8, -0.5], \ b \in [7, 9], \) and \( c \in [5, 7] \)

17. Graph the equation \( f(x) = -(x + 4)^2 - 12 \).
18. Factor the quadratic below. Then, choose the intervals that contain the constants in the form \((ax + b)(cx + d); b \leq d\).

\[64x^2 + 48x + 9\]

\[a = 8 \quad b = 3 \quad c = 8 \quad d = 3\]

A. \(a \in [0.5, 1.5], \quad b \in [2, 5], \quad c \in [63.5, 64.5], \quad \text{and} \quad d \in [1.5, 3.5]\)

B. \(a \in [0.5, 1.5], \quad b \in [-3.5, -1.5], \quad c \in [63.5, 64.5], \quad \text{and} \quad d \in [-4.5, -2.5]\)

C. \(a \in [15.5, 17], \quad b \in [2, 5], \quad c \in [3, 4.5], \quad \text{and} \quad d \in [1.5, 3.5]\)

\(\text{D.} \quad a \in [7, 9], \quad b \in [2, 5], \quad c \in [7, 8.5], \quad \text{and} \quad d \in [1.5, 3.5]\)

E. \(a \in [3, 4.5], \quad b \in [2, 5], \quad c \in [15, 17], \quad \text{and} \quad d \in [1.5, 3.5]\)

19. Solve the quadratic equation below. Then, choose the intervals that the solutions \(x_1\) and \(x_2\) belong to, with \(z_1 \leq z_2\).

\[144x^2 - 16 = 0\]

\[x_1 = \boxed{-0.3} \quad x_2 = \boxed{0.3}\]

A. \(x_1 \in [-0.2, -0.05] \quad \text{and} \quad x_2 \in [0.99, 1.09]\)

B. \(x_1 \in [-0.07, 0] \quad \text{and} \quad x_2 \in [3.83, 4.02]\)

C. \(x_1 \in [-0.8, -0.65] \quad \text{and} \quad x_2 \in [0.06, 0.3]\)

D. \(x_1 \in [-4.13, -3.98] \quad \text{and} \quad x_2 \in [-0.07, 0.05]\)

\(\text{E.} \quad x_1 \in [-0.52, -0.15] \quad \text{and} \quad x_2 \in [0.28, 0.41]\)

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

\[-7x^2 + 7x + 7 = 0\]

\[x_1 = \boxed{-0.618} \quad x_2 = \boxed{1.618}\]

A. \(x_1 \in [-3.6, -1.5] \quad \text{and} \quad x_2 \in [0.5, 0.7]\)

\(\text{D.} \quad x_1 \in [-1.6, 0.1] \quad \text{and} \quad x_2 \in [1.5, 2.5]\)

C. \(x_1 \in [-11.4, -8.8] \quad \text{and} \quad x_2 \in [3.7, 4.7]\)

D. \(x_1 \in [-5.3, -4.1] \quad \text{and} \quad x_2 \in [11.3, 11.9]\)

\(\text{E.} \quad \text{There are no Real solutions.}\)