1.

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2. Simplify the expression below into the form $a + bi$. Then, choose the intervals that a and b belong to.

$$\frac{-27 - 77i}{-2 - 4i}$$

A. $a \in [-13.5, -12]$ and $b \in [12.5, 13.5]$

B. $a \in [17, 19]$ and $b \in [1.5, 2.5]$

C. $a \in [17, 19]$ and $b \in [45.5, 46.5]$

D. $a \in [361, 362.5]$ and $b \in [1.5, 2.5]$

E. $a \in [12, 14]$ and $b \in [18.5, 20]$

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3. Simplify the expression below into the form $a + bi$. Then, choose the intervals that a and b belong to.

$$(-5 + 7i)(4 - 6i)$$

A. $a \in [-63, -61]$ and $b \in [-3, -1]$

B. $a \in [-24, -17]$ and $b \in [-46, -37]$

C. $a \in [-63, -61]$ and $b \in [2, 4]$

D. $a \in [17, 24]$ and $b \in [55, 59]$

E. $a \in [17, 24]$ and $b \in [-61, -57]$
