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

$$(6 + 5i)(-4 + 10i)$$

A. $a \in [22, 27]$ and $b \in [72, 87]$

B. $a \in [-79, -71]$ and $b \in [36, 43]$

C. $a \in [-79, -71]$ and $b \in [-44, -37]$

D. $a \in [-26, -23]$ and $b \in [48, 55]$

E. $a \in [22, 27]$ and $b \in [-81, -76]$

---

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

$$\frac{63 - 55i}{2 + 4i}$$

A. $a \in [-5, -3.5]$ and $b \in [-18.5, -17.5]$

B. $a \in [31, 32]$ and $b \in [-14.5, -13.5]$

C. $a \in [-5, -3.5]$ and $b \in [-363.5, -361.5]$

D. $a \in [16.5, 19]$ and $b \in [6.5, 7.5]$

E. $a \in [-95, -93.5]$ and $b \in [-18.5, -17.5]$

---

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

$$\frac{-63 + 33i}{4 - 5i}$$

A. $a \in [-418.5, -416.5]$ and $b \in [-4.5, -2.5]$

B. $a \in [-3, -0.5]$ and $b \in [10, 12.5]$

C. $a \in [-10.5, -9.5]$ and $b \in [-4.5, -2.5]$

D. $a \in [-10.5, -9.5]$ and $b \in [-184, -181.5]$

E. $a \in [-16, -15.5]$ and $b \in [-8, -6]$

---

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

$$(-3 - 2i)(-4 + 9i)$$

A. $a \in [28, 39]$ and $b \in [-20.3, -18.6]$

B. $a \in [-7, -4]$ and $b \in [-38.2, -34.6]$

C. $a \in [28, 39]$ and $b \in [16, 20.5]$

D. $a \in [4, 15]$ and $b \in [-18.1, -15.7]$

E. $a \in [-7, -4]$ and $b \in [32.5, 35.6]$

---