1. Simplify the expression below and choose the interval the simplification is contained within.

$$2 - 14^2 + 10 \div 8 * 7 \div 15$$

   A. $[-193.9, -192.74]$

   B. $[197.02, 198.21]$

   C. $[-194.43, -193.68]$

   D. $[198.41, 199.08]$

   E. None of the above

2. Choose the **smallest** set of Complex numbers that the number below belongs to.

$$\frac{\sqrt{90}}{5} + \sqrt{-4}i$$

   A. Rational

   B. Not a Complex Number

   C. Irrational

   D. Pure Imaginary

   E. Nonreal Complex

3. Choose the **smallest** set of Real numbers that the number below belongs to.

$$-\sqrt{\frac{14400}{64}}$$

   A. Not a Real number

   B. Irrational

   C. Integer

D. Whole

E. Rational

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

$$(-5 + 3i)(9 - 6i)$$

A. $a \in [-28, -25]$ and $b \in [54, 60]$

B. $a \in [-64, -62]$ and $b \in [-4, 1]$

C. $a \in [-64, -62]$ and $b \in [0, 6]$

D. $a \in [-28, -25]$ and $b \in [-60, -55]$

E. $a \in [-52, -43]$ and $b \in [-23, -16]$

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

$$\frac{9 - 44i}{-6 + 2i}$$

A. $a \in [-0.7, 2.6]$ and $b \in [6.5, 7.3]$

B. $a \in [-143.2, -138.8]$ and $b \in [5.7, 6.9]$

C. $a \in [-1.6, 0.6]$ and $b \in [-24.8, -20.6]$

D. $a \in [-5, -3.2]$ and $b \in [5.7, 6.9]$

E. $a \in [-5, -3.2]$ and $b \in [245.9, 248]$