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

$$\sqrt{\frac{324}{625}}$$

- A. Rational
 - B. Whole
 - C. Irrational
 - D. Not a Real number
 - E. Integer
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2. Simplify the expression below and choose the interval the simplification is contained within.

$$13 - 20 \div 17 * 11 - (16 * 3)$$



- A. $[-48.13, -47.85]$
 - B. $[-35.26, -35.07]$
 - C. $[60.68, 60.9]$
 - D. $[-47.84, -47.76]$
 - E. $[29.82, 30.01]$
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3. Choose the **smallest** set of Complex numbers that the number below belongs to.

$$\frac{\sqrt{65}}{20} + 6i^2$$

- A. Rational
 - B. Irrational
 - C. Pure Imaginary
 - D. Nonreal Complex
 - E. Not a Complex Number
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4. Simplify the expression below into the form $a + bi$. Then, choose the intervals that a and b belong to.

$$(10 - 9i)(6 - 7i)$$

$$a = \boxed{} \quad b = \boxed{}$$

- A. $a \in [121, 125]$ and $b \in [-20, -7]$
B. $a \in [58, 62]$ and $b \in [59, 67]$
C. $a \in [-6, 2]$ and $b \in [-131, -118]$
D. $a \in [121, 125]$ and $b \in [15, 22]$
E. $a \in [-6, 2]$ and $b \in [122, 129]$
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5. Simplify the expression below into the form $a + bi$. Then, choose the intervals that a and b belong to.

$$\frac{-9 - 55i}{2 + 3i}$$

$$a = \boxed{} \quad b = \boxed{}$$

- A. $a \in [-5, 1]$ and $b \in [-19, -17]$
B. $a \in [-16, -9]$ and $b \in [-84, -79]$
C. $a \in [-16, -9]$ and $b \in [-8, -4]$
D. $a \in [-189, -178]$ and $b \in [-8, -4]$
E. $a \in [7, 15]$ and $b \in [-15, -9]$
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