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

$$\sqrt{\frac{225}{256}}$$

- 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.

$$19 - 8 \div 16 * 15 - (3 * 11)$$



- A. $[-18, -10]$
 - B. $[47, 57]$
 - C. $[-23, -16]$
 - D. $[89, 95]$
 - E. $[257, 268]$
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3. Choose the **smallest** set of Complex numbers that the number below belongs to.

$$\frac{20\pi}{0} + 9i^2$$

- A. Nonreal Complex
 - B. Pure Imaginary
 - C. Not a Complex Number
 - D. Irrational
 - 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.

$$(10 - 9i)(-4 - 6i)$$

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

- A. $a \in [11, 16]$ and $b \in [-97, -94]$
B. $a \in [11, 16]$ and $b \in [94, 107]$
C. $a \in [-99, -88]$ and $b \in [21, 30]$
D. $a \in [-46, -37]$ and $b \in [53, 57]$
E. $a \in [-99, -88]$ and $b \in [-27, -17]$
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5. Simplify the expression below into the form $a + bi$. Then, choose the intervals that a and b belong to.

$$\frac{36 - 55i}{3 - 1i}$$

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

- A. $a \in [15, 18]$ and $b \in [-16, -7]$
B. $a \in [152, 165]$ and $b \in [-16, -7]$
C. $a \in [0, 6]$ and $b \in [-22, -19]$
D. $a \in [15, 18]$ and $b \in [-133, -128]$
E. $a \in [7, 16]$ and $b \in [51, 62]$
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