

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

$$-\sqrt{\frac{900}{10}}$$

- A. Integer
 - B. Rational
 - C. Irrational
 - D. Not a Real number
 - E. Whole
-

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

$$2 - 11 \div 16 * 19 - (14 * 20)$$



- A. $[-503, -497]$
 - B. $[17, 29]$
 - C. $[-293, -287]$
 - D. $[-279, -271]$
 - E. $[279, 286]$
-

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

$$\frac{13\pi}{0} + 10i^2$$

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

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

$$(5 - 3i)(-8 + 7i)$$

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

- A. $a \in [-27, -16]$ and $b \in [58, 63]$
B. $a \in [-65, -58]$ and $b \in [5, 13]$
C. $a \in [-65, -58]$ and $b \in [-15, -5]$
D. $a \in [-27, -16]$ and $b \in [-60, -56]$
E. $a \in [-44, -36]$ and $b \in [-23, -17]$
-

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

$$\frac{27 + 55i}{-6 - 2i}$$

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

- A. $a \in [-5.2, -1.4]$ and $b \in [-32, -23]$
B. $a \in [-7.2, -6.6]$ and $b \in [-9, -2]$
C. $a \in [-273.5, -271.7]$ and $b \in [-9, -2]$
D. $a \in [-7.2, -6.6]$ and $b \in [-278, -275]$
E. $a \in [-2.2, -1.2]$ and $b \in [-14, -7]$
-