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

$$\sqrt{\frac{-2100}{10}}$$

   A. Rational

   B. Integer

   C. Not a Real number

   D. Irrational

   E. Whole

---

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

$$6 - 8 \div 12 * 2 - (14 * 9)$$

   $\boxed{}$

   A. $[-121.89, -120.73]$

   B. $[-60.38, -59.39]$

   C. $[131.44, 132.73]$

   D. $[-84.07, -83.98]$

   E. $[-120.44, -120.22]$

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

$$\frac{0}{4\pi} + 10i$$

   A. Pure Imaginary

   B. Nonreal Complex

   C. Not a Complex Number

   D. Rational

   E. Irrational

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

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

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

A. $a \in [64, 71]$ and $b \in [-98, -92]$

B. $a \in [64, 71]$ and $b \in [91, 95]$

C. $a \in [112, 115]$ and $b \in [-15, -11]$

D. $a \in [89, 96]$ and $b \in [23, 25]$

E. $a \in [112, 115]$ and $b \in [11, 16]$

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

$$\frac{-27 - 22i}{-6 + 5i}$$

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

A. $a \in [0.82, 0.93]$ and $b \in [263, 272]$

B. $a \in [4.47, 4.51]$ and $b \in [-10, -1]$

C. $a \in [4.43, 4.46]$ and $b \in [-4, 3]$

D. $a \in [51.94, 52.13]$ and $b \in [2, 7]$

E. $a \in [0.82, 0.93]$ and $b \in [2, 7]$