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

$$-\sqrt{\frac{-2548}{14}}$$

   A. Not a Real number

   B. Whole

   C. Rational

   D. Irrational

   E. Integer

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

$$\frac{-18 + 33i}{6 + 4i}$$

   A. $a \in [-1, 3]$ and $b \in [3.4, 5.6]$

   B. $a \in [-1, 3]$ and $b \in [268.2, 270.5]$

   C. $a \in [-4, 0]$ and $b \in [5.9, 9.6]$

   D. $a \in [-7, -4]$ and $b \in [-1.6, 4.3]$

   E. $a \in [20, 26]$ and $b \in [3.4, 5.6]$

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

$$19 - 9^2 + 18 \div 15 * 20 \div 7$$

   A. $[-62.1, -59.9]$

   B. $[102.7, 105.8]$

   C. $[98.5, 100.2]$

   D. $[-61.2, -56.5]$

   E. None of the above

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

$$(-6 + 8i)(-2 + 5i)$$

   A. $a \in [4, 15]$ and $b \in [38, 45]$

   B. $a \in [-36, -24]$ and $b \in [42, 48]$

   C. $a \in [-36, -24]$ and $b \in [-47, -39]$

   D. $a \in [48, 61]$ and $b \in [10, 17]$

   E. $a \in [48, 61]$ and $b \in [-22, -10]$

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

$$\sqrt{\frac{-825}{0}}i + \sqrt{112}i$$

   A. Nonreal Complex

   B. Not a Complex Number

   C. Rational

   D. Irrational

   E. Pure Imaginary