1. A circular target with a radius of 12 inches is to have a circular bull’s-eye painted in the center so that the area of the bull’s-eye is 1% of the total area of the target. What should be the radius of the bull’s-eye?

   \[ A = 1.2 \text{ in} \]

2. Four numbers have a sum of 45. If 2 is added to the first number, 2 is subtracted from the second number, 2 is multiplied by the third number, and 2 is divided into the fourth number, the results will be equal. Find the product of the four numbers.

   \[ A = 7600 \]

3. If \( k = 2^{2008} \), then what is the value of \( 2^{2006} + 2^{2007} + 2^{2008} + 2^{2009} + 2^{2010} \) in terms of \( k \)?

   \[ A = \frac{21}{4} k \]

4. One day a store brought in $4400.00 in gross receipts by selling 60 items of clothing consisting of pants, jackets, and suits. If the pants sold for $30.00, jackets for $80.00, and suits for $120.00, what is the largest number of suits that the store could have sold?

   \[ A = 25 \]

5. Two highways, one 50 feet wide and the other 60 feet wide, meet at a 60 degree angle. What is the area of the intersection of the two roads? (Round off answer to the nearest square foot.)

   \[ A \approx 3464 \text{ ft}^2 \]

6. Lines \( L_1 \) and \( L_2 \) both contain the point \( (3,4) \). The slope of line \( L_1 \) is one more than the slope of line \( L_2 \). Line \( L_2 \) crosses the y-axis \( "K" \) units above the point where \( L_1 \) crosses the y-axis. Find the value of \( K \).

   \[ A = k = 3 \]