1.) $\sqrt{2k^{2}+17}-x=0$

If $k>0$ and $x=7$ in the equation above, what is the value of $k$?

A) 2

B) 3

C) 4

D) 5

2.) Which of the following complex numbers is equivalent to $\frac{3-5i}{8+2i}$ ? (Note: $i= \sqrt{-1}$

A) $\frac{3}{8}-\frac{5i}{2}$

B) $\frac{3}{8}+\frac{5i}{2}$

C) $\frac{7}{34}-\frac{23i}{34}$

D) $\frac{7}{34}+\frac{23i}{34}$

3.) $ax+by=12$

 $2x+8y=60$

In the system of equations above, $a$ and $b$ are constants. If the system has infinitely many solutions, what is the value of $\frac{a}{b}$ ?