Mathematics Assessment Program
College and Career Readiness Mathematics

Short Tasks: Reasoning with Equations and Inequalities 1

1. If $x^2 - y^2 = 55$, and $x - y = 11$, find the value of y.

2. If $x^2 = 289$ what 2 values could x have?

3. If $3x + y = 19$, and $x + 3y = 1$.
   Find the value of $2x + 2y$.

4. If x and y are integers and $x + y < 11$, and $x > 6$
   What is the smallest possible value of $x - y$?

5. Sketch the solution set of the system
   $x \geq 0, y < 3, x - y > 1, y > 2x - 1$.

6. If $\dfrac{5c}{4} - \dfrac{2c}{3} = \dfrac{7}{10}$, find c.