1. We wish to solve the inequality $3 - |2x - 4| \leq 1$. First we isolate the quantity $|2x - 4|$ by subtracting 1 from both sides and adding $|2x - 4|$ to both sides:

$$2 \leq |2x - 4|$$

or equivalently

$$|2x - 4| \geq 2$$

This implies that the quantity $2x - 4$ must be 2 or more units away from 0 on the number line. This fact gives rise to the inequalities

$$2x - 4 \geq 2 \quad \text{or} \quad 2x - 4 \leq -2$$

We solve each of these inequalities:

- $2x - 4 \geq 2 \Rightarrow 2x \geq 6 \Rightarrow x \geq 3$
- $2x - 4 \leq -2 \Rightarrow 2x \leq 2 \Rightarrow x \leq 1$

The solution set is thus $(-\infty, 1] \cup [3, \infty)$.

2. First we put the equation $2x + 5y + 8 = 0$ in slope-intercept form:

$$2x + 5y + 8 = 0$$

$$5y = -2x - 8$$

$$y = -\frac{2}{5}x - \frac{8}{5}$$

We want the equation of the line perpendicular to the line $2x + 5y + 8 = 0$ and passing through the point $(-1, -2)$. Since the line $2x + 5y + 8 = 0$ has slope $-\frac{2}{5}$, the desired line has slope $\frac{5}{2}$.

We now know the slope and a point on the desired line, so to determine its equation, we use point-slope form:
\[ y - y_1 = m(x - x_1) \]
\[ y - (-2) = \frac{5}{2}(x - (-1)) \]
\[ y + 2 = \frac{5}{2}(x + 1) \]

Now we put this equation in slope-intercept form:

\[ y + 2 = \frac{5}{2}x + \frac{5}{2} \]
\[ y = \frac{5}{2}x + \frac{1}{2} \]

Thus, the equation of the line perpendicular to the line \(2x + 5y + 8 = 0\) and passing through the point \((-1, -2)\) is

\[ y = \frac{5}{2}x + \frac{1}{2} \]

3. The midpoint of the segment joining points \((1, -6)\) and \((-1, -3)\) is

\[ \left( \frac{1 + (-1)}{2}, \frac{-6 + (-3)}{2} \right) = \left( 0, \frac{-9}{2} \right) \]