Solving Multi-Step Inequalities

Solve each inequality:

① $-3(y+1)+4y \geq 4(y-6)$

$-3y-3+4y \geq 4y-24$

$y-3 \geq 4y-24$

$-4y \quad\quad -4y$

$-3y-3 \geq -24$

$+3 \quad\quad +3$

$-3y \geq -21$

$\frac{-3y}{-3} \geq \frac{-21}{-3}$

$y \leq 7$

② $10-8a \geq 2(5-4a)$

$10-8a \geq 10-8a$

$+8a \quad\quad +8a$

$10 \geq 10$

All Real Numbers

③ $6m-5 > 7m+7-m$

$6m-5 > 6m+7$

$-6m \quad\quad -6m$

$-5 \not> 7$

No Solution