Study Guide for Monday's Test

10-1 ① $\frac{x}{5}+1=11$

$-1 \quad -1$

$(5)\frac{x}{5}=10(5)$

$x=50$

10-2 ② $5-2(x+3)=3$

$5-2x-6=3$

$+6 \quad +6$

$5-2x=9$

$-5 \quad -5$

$\frac{-2x}{-2}=\frac{4}{-2}$

$x=-2$

10-3 ③ $6x-7=3(x+4)-4$

$6x-7=3x+12-4$

$+4 \quad +4$

$6x-3=3x+12$

$-3x \quad -3x$

$3x-3=12$

$+3 \quad +3$

$\frac{3x}{3}=\frac{15}{3}$

$x=5$

10-4 ④ Solve for a.

$4b+a^2=16$

$-4b \quad -4b$

$a^2=16-4b$

$\sqrt{a^2}=\pm\sqrt{16-4b}$

$a=\pm\sqrt{16-4b}$

10-5 ⑤ Solve then graph.

$-3x-8\leq 5x+16$

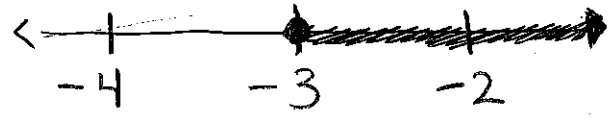
$+8 \quad +8$

$-3x\leq 5x+24$

$-5x \quad -5x$

$\frac{-8x}{-8}\leq\frac{24}{-8}$

$x\geq -3$



10-6 ⑥ Solve the system.

$3x-6y=-6$

$x+y=7$

$7-x=\frac{1}{2}x+1$

$-\frac{1}{2}x \quad +\frac{1}{2}x$

$7-1\frac{1}{2}x=1$

$-7 \quad -7$

$\left(-\frac{2}{3}\right)-1\frac{1}{2}x=\frac{-6}{1}\left(-\frac{2}{3}\right)$

$x=\frac{12}{3}$ $x=4$

$3x-6y=-6$

$-3x \quad -3x$

$\frac{-6y}{-6}=\frac{-3x-6}{-6}$

$y=\frac{1}{2}x+1$

$x+y=7$

$-x \quad -x$

$y=7-x$

$4+y=7$

$-4 \quad -4$

$y=3$

$(4,3)$