T/PC
P.1-P.5 Requiz
Review 2

① $y^2+2y=80$

$\left(\frac{2}{2}\right)^2$ 1^2 1

$y^2+2y+1=80+1$

$(y+1)^2=81$

$y+1=\pm 9$

$y=-1\pm 9$

$y=8,\ y=-10$

② $x^2-10x-7=3$

$x^2-10x=10$

$\left(\frac{-10}{2}\right)^2$ $(-5)^2$ 25

$x^2-10x+25=10+25$

$(x-5)^2=35$

$x-5=\pm\sqrt{35}$

$+5\ \ +5$

$x=5\pm\sqrt{35}$

③ $k^2+16k=-55$

$\left(\frac{16}{2}\right)^2$ 8^2 64

$k^2+16k+64=-55+64$

$(k+8)^2=9$

$k+8=\pm 3$

$k=-8\pm 3$

$k=-5$

$k=-11$

④ $2x^2-24x+70=-30$

$\frac{2x^2-24x=-100}{2}$

$x^2-12x=-50$

$\left(\frac{-12}{2}\right)^2$ $(-6)^2$ 36

$x^2-12x+36=-50+36$

$(x-6)^2=-14$

$x-6=\pm\sqrt{-14}$

$+6\ \ +6$

$x=6\pm i\sqrt{14}$

⑤ $\frac{5y^2+30y=175}{5}$

$y^2+6y=35$

$y^2+6y+9=35+9$

$\left(\frac{6}{2}\right)^2$ 3^2 9

$(y+3)^2=44$

$y+3=\pm\sqrt{44}$

$-3\ \ -3$

$y=-3\pm\sqrt{44}$

$y=-3\pm 2\sqrt{11}$

⑥ $x=\frac{-10\pm\sqrt{10^2-4(3)(5)}}{2(3)}$

$x=\frac{-10\pm\sqrt{100-60}}{6}$

$x=\frac{-10\pm\sqrt{40}}{6}$ (4, 10)

$x=\frac{-10\pm 2\sqrt{10}}{6}=\frac{-5\pm\sqrt{10}}{3}$