

Practice 2.6 page 69 #1-20 (odd)

① $|x|=3; x=\pm 3$

③ $|x|=-2; \text{no solution}$

⑤ $|x|=0; x=0$

⑦ $|x+1|=4$
 \wedge

$x+1=4$ or $x+1=-4$

$\frac{-1 \quad -1}{\quad \quad} \quad \frac{-1 \quad -4}{\quad \quad}$
 $x=3$ or $x=-5$

⑨ $|2x|=1$
 \wedge

$\frac{2x=1}{2 \quad 2}$ or $\frac{2x=-1}{2 \quad 2}$

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

⑪ $|7x+1|=-12; \text{no solution}$

⑬ $|2x+5|=9$
 \wedge

$2x+5=9$ or $2x+5=-9$

$\frac{-5 \quad -5}{\quad \quad} \quad \frac{-5 \quad -5}{\quad \quad}$
 $\frac{2x=4}{2 \quad 2} \quad \frac{2x=-14}{2 \quad 2}$
 $x=2$ or $x=-7$

⑮ $|-x+2|=8$
 \wedge

$-x+2=8$ or $-x+2=-8$

$\frac{-2 \quad -2}{\quad \quad} \quad \frac{-2 \quad -2}{\quad \quad}$
 $\frac{-x=6}{-1 \quad -1} \quad \frac{-x=-10}{-1 \quad -1}$

$x=-6$ or $x=10$

⑰ $|-5|x+4|= -10$
 $\frac{-5}{-5} \quad \frac{-5}{-5}$

$|x+4|=2$
 \wedge

$x+4=2$ or $x+4=-2$

$\frac{-4 \quad -4}{\quad \quad} \quad \frac{-4 \quad -4}{\quad \quad}$
 $x=-2$ or $x=-6$

⑲ $2|x+1|=6$
 $\frac{2}{2} \quad \frac{2}{2}$

$|x+1|=3$
 \wedge

$x+1=3$ or $x+1=-3$

$\frac{-1 \quad -1}{\quad \quad} \quad \frac{-1 \quad -1}{\quad \quad}$
 $x=2$ or $x=-4$