1. $|3x+1|=4 \qquad \{-\frac{5}{3};1\}$

2. $|x|=|x+1| \qquad \{-\frac{1}{2}\}$

3. $x^2+|x|=0 \qquad \{0\}$

4. $x^2+|x+1|=1 \qquad \{-1;0\}$

5. $|x+2|=x-|x+3| \qquad \emptyset$

6. $2x+|x|-3|x-3|=0 \qquad \{\frac{3}{2}\}$

7. $|2x-1|+|3-x|=1 \qquad \emptyset$

8. $|x+2|=4|x-3| \qquad \{2;\frac{14}{3}\}$

9. $|8-5x|=5x-8 \qquad \langle\frac{8}{5};\infty)$

10. $|4x-7|=-1 \qquad \emptyset$

11. $|x-1|+3|2-x|=x-|1-x| \qquad \{2\}$

12. $2x^2+|x-1|+|x+2|=0 \qquad \emptyset$

13. $|x+2|\cdot|x-2|=3 \qquad \{1;-1;\sqrt{7};-\sqrt{7}\}$