## Solving Quadratics by Using the Quadratic Formula - Practice

Simplify the following problems. Factor completely.

1. $6 x^{2}-3 x=5$
2. $x^{2}-2 x-4=0$
3. $2 x^{2}-12 x+15=0$
4. $6 x^{2}+19 x=15$
5. $25 x^{2}-3 x+49=0$
6. $x^{2}-6=7 x$
7. $-3 x-28=x^{2}$
8. $-x^{2}+3 x-28=0$
9. $5 x^{2}+20 x-20=0$
10. $-x^{2}+7 x=-10$

## Solutions:

1. $x=\frac{3 \pm \sqrt{129}}{12}$
2. $x=1 \pm \sqrt{5}$
3. $x=\frac{3 \pm \sqrt{6}}{2}$
4. $x=\frac{-19 \pm \sqrt{701}}{12}$
5. $x=\frac{3 \pm i \sqrt{4891}}{50}$
6. $x=\frac{7 \pm \sqrt{73}}{2}$
7. $x=\frac{3 \pm i \sqrt{103}}{2}$
8. $x=-4,7$
9. $x=-2$
10. $x=2,5$
