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$\qquad$

Expand the brackets so that you can use the quadratic formula.

Remember: $a x^{2}+b x+c=0$ where $a, b$ and $c$ are coefficients.

$$
x=\frac{-b \pm \sqrt{b^{2}-4 a c}}{2 a}
$$

Find solutions two solutions for $x$ with each of the following:
Some of these will have no real solution as you cannot find the square root of a minus number.

1. $(2 x+4)(3 x-7)=0$
2. $(4 x-7)(9 x+3)=0$
3. $(8 x-2)(3 x+2)=0$
4. $(4 x+4)(5 x-3)=0$
5. $(7 x+2)^{2}=0$
6. $12 x+(3 x-4)^{2}=0$
7. $(9 x+7)(8 x+3)=0$
8. $(12 x-8)(7 x+5)=0$
9. $8(7 x+3)^{2}+67=0$
