13. 

$$
\begin{aligned}
& 8 x^{2}-10 x+3=0 \\
& \begin{array}{l}
4 x, 2 x \\
8,1 x \\
2 x, 4 x \\
1 x, 8 x
\end{array} \frac{(2 x-1)(4 x-3)}{-4 x}=0 \\
& \begin{array}{rr}
2 x-1=0 & \text { or } \begin{aligned}
& 4 x-3=0 \\
&+1+1 \\
& \frac{2 x}{2}-\frac{1}{2}
\end{aligned} \\
\begin{aligned}
x=\frac{1}{2} & \text { or } \\
\frac{4 x}{4} & =\frac{5}{4} \\
x & =\frac{3}{4}
\end{aligned}
\end{array} \\
& \sqrt[37 .]{(x+4)^{2}}=\sqrt{169} \\
& \begin{array}{c}
x+y= \pm 13 \\
-4-4
\end{array} \quad-4 \pm 13 \\
& x=9,-17 \\
& 26\left(3 w+2(3 w-2)=-w^{2}+26 w-16\right. \\
& 9 w^{2}-6 w+6 w-4=-w^{2}+26 w-16 \\
& \begin{array}{l}
9 w^{2}-4=-w^{2}+26 w-16 \\
+w^{2}-26 w+16+w^{2}-26 w+16
\end{array} \\
& +w^{2}-26 w+16+w^{2}-26 w+16 \\
& \frac{10 \omega^{2}}{2}-\frac{26 \omega}{2}+\frac{12}{2}=\frac{0}{2} \\
& 5 w^{2}-13 w+6=0 \\
& \frac{(5 w-3)(w-2)}{-5 w}=0 \quad \begin{array}{l}
\left.\begin{array}{l}
2,3 \\
6,1 \\
-10 w \\
1,6 \\
3,2
\end{array}\right) \\
\hline 10
\end{array} \\
& 5 w-3=0 \quad w-2=0 \\
& \frac{+3+3}{\frac{5 w}{5}=\frac{3}{5}} \quad 4-2 \\
& \sqrt{\left(\frac{y-3}{}=\frac{3}{5}\right. \text { or }} \\
& 7(x+2)=1{ }^{(1)} \\
& \begin{array}{ll}
x \pm \frac{7}{3}=\frac{ \pm}{\frac{7}{3}} & 0.4 t \\
\frac{98}{3} i & 5.76
\end{array} \\
& \therefore=\frac{7}{3}+\frac{\sqrt{x}}{3} \\
& \begin{array}{c}
0.97 \\
5-7 v \\
8 \uparrow-
\end{array}
\end{aligned}
$$

6.2 Completing the square

Solving $a x^{2}+b x+c=0$, and it always gives us a Solution opposed factoring
To complete the square:
(1) need to get rid of a ( $x^{2}$ alone)
(2) move the constant " $c$ " to the other side
(3) divide the $b$ by 2 , then square it.
(4) Add this number to both sides
(5) factor t solve

Ex:

$$
\begin{aligned}
& x^{2}-8 x+7=0 \\
& -7-7 \\
& \hline x^{2}-8 x+16=-7+16 \\
& -8 \div 2=(-4)^{2}=16 \\
& x^{2}-8 x+16=9 \\
& \sqrt{(x-4)^{2}}=\sqrt{9} \\
& x-4= \pm 3 \\
& +4=7 \\
& x=7,
\end{aligned}
$$

$$
\begin{gathered}
\frac{4 x^{2}}{4}+\frac{4 x}{4}-\frac{9}{4}=\frac{0}{4} \\
x^{2}+x-\frac{9}{4}=0 \\
+\frac{9}{4}=\frac{9}{4} \\
x^{2}+x+\frac{1}{4}=\frac{9}{4}+\frac{1}{4} \\
1 \div 2\left(\left(\frac{1}{2}\right)^{2}=\frac{1}{4}\right. \\
x^{2}+x+\frac{1}{4}=\frac{10}{4} \\
\sqrt{\left(x+\frac{1}{2}\right)^{2}}=\sqrt{\frac{10}{4}} \\
x+\frac{1}{2}= \pm \frac{\sqrt{10}}{2} \\
-\frac{1}{2} \quad-\frac{1}{2} \\
x=-\frac{1}{2} \pm \frac{\sqrt{10}}{2} \\
x=\frac{-1 \pm \sqrt{10}}{2}
\end{gathered}
$$

$$
\begin{aligned}
& H W: p .381 \\
& 28-62 \text { even }
\end{aligned}
$$

