```
16. \(x-y=2 \quad y=x-2\)
    \(x^{2}=100-y^{2}\)
    \(x^{2}=100-(x-2)^{2}\)
    \(x^{2}=100-\left(x^{2}-4 x+4\right)\)
\(\begin{aligned} & x^{2}=100-x^{2}+4 x-4 \\ & 2 x^{2}-4 x-96=0\end{aligned} \rightarrow x=\frac{2 \pm \sqrt{(-2)^{2}-4(1)(-48)}}{2(1)}\)
2
\(x^{2}-2 x-48=0\)
    \(a+x=8=x-2 \quad a+x=-6 \quad x=\frac{2 \pm 14}{2}\)
    \begin{tabular}{l|ll}
\(y=8-2\) & \(y=-6-2\) & \(x=8,-6\)
\end{tabular}
    \(y=6\)
\((8,6)\) \(\begin{gathered}y=-8 \\ (-6,-8)\end{gathered}\)
```

$$
\begin{aligned}
& \text { 21. } x^{2}+4 y^{2}=36 \\
& \begin{array}{l}
(-1)^{2}+4 y^{2}=36 \\
\frac{x^{2}+y-3=0}{4 y^{2}-y+3=36}
\end{array} \quad y=\frac{1 \pm \sqrt{(-1)^{2}-4(4)(-33)}}{2(4)} \\
& 4 y^{2}-y-33=0 \quad y=\frac{1 \pm \sqrt{529}}{8} \\
& \begin{array}{c}
x^{2}+3-3=6 \\
x^{2}=0 \\
x=0 \\
x^{2}-2.75-3=0 \\
x^{2}=5.75
\end{array} \\
& y=\frac{1 \pm 23}{8} \\
& \begin{array}{l}
x^{2}=5.75 \\
x \approx \pm 2.4
\end{array} \\
& (0,3)( \pm 2.4,-2.75) \\
& ( \pm 1.3,2.0) \quad( \pm 1.3,-2.0) \\
& ( \pm 1.3, \pm 2.0)
\end{aligned}
$$

## P. 688-690

$11-12,14-15,18,20$,
$22,24,26,28,30,32$,
$35,37-38,40-41,56-57$

Graph 14, 18, 20, 22,
26, 28, 32, 35

