\#4

$a$.

$$
\begin{aligned}
& x^{2}=12.5 \\
& x=\sqrt{60} \\
& x=\sqrt{4.15} \\
& x=2 \sqrt{15} \\
& \text { OK }=2 \sqrt{15}
\end{aligned}
$$

b. $\quad(3 \sqrt{5})^{2}=9 \cdot x$
c. $(3 \sqrt{2})^{2}=3 \cdot x$ $9 \cdot 2=3 \cdot x$

$$
18=3 x
$$

$$
6=x
$$

$$
J M=6
$$

d.

$$
\begin{aligned}
& x^{2}=5.11 \\
& x^{2}=55 \\
& x=\sqrt{55}
\end{aligned}
$$


\#17

c.

$$
\begin{aligned}
x^{2} & =8.12 \\
\sqrt{x^{2}} & =\sqrt{96} \\
x & =\sqrt{16 \cdot 6} \\
x & =4 \sqrt{6}
\end{aligned}
$$

a.

$$
\begin{aligned}
& x^{2}=7.4 \\
& x=2 \sqrt{7}
\end{aligned}
$$

b.

$$
\begin{aligned}
8^{2} & =6(x-6) \\
64 & =6 x-36 \\
100 & =6 x \\
x & =16^{2} / 3
\end{aligned}
$$

d.

$$
\begin{aligned}
& 7^{2}=x \cdot 12 \\
& 49=12 x \\
& \frac{49}{12}=x \quad 12-\frac{49}{12}=7 \frac{11}{12}
\end{aligned}
$$

\#21 Given $\overline{A D} \perp \overline{C D}$

$$
B C=5 \quad A D=6
$$

Find: $B D$

$$
\begin{gathered}
6^{2}=x(x+5) \\
36=x^{2}+5 x \\
0=x^{2}+5 x-36 \\
0=(x+9)(x-4) \\
x=-9,4
\end{gathered}
$$



$$
\begin{aligned}
& y^{2}=4.5 \\
& \sqrt{y^{2}}=\sqrt{20} \\
& y=2 \sqrt{5}
\end{aligned}
$$

