24. 

$$
\begin{aligned}
& f(x)=\frac{1}{3} x+4 \\
& y=\frac{1}{3} x+4 \\
& x=\frac{1}{3} y+4 \\
& -4
\end{aligned}
$$

$$
3(x-4)=\frac{1}{3} y(3)
$$

$$
3 x-12=y
$$

$$
3 x+12=f^{-1}(x)
$$



30.

$$
\begin{aligned}
& f(x)=x-5 \\
& g(x)=x+5
\end{aligned}
$$

$$
\begin{aligned}
{[f \circ g](x)=f(x+5) } & =x+5-5 \\
& =x \\
{[g \circ f](x)=g(x-5) } & =x-5+5 \\
& =x
\end{aligned}
$$

$$
\begin{aligned}
& (x+1) y=\sqrt{3 x+4} \\
& \begin{array}{rlr}
3 x+4 & =0 & \frac{x}{-\frac{4}{3}} \\
3 x & \geq-4 & -1
\end{array} \\
& 0 \quad 0 \quad 0 \\
& \begin{array}{l}
0 \\
10
\end{array}
\end{aligned}
$$

