Bellwork:
Write the equation of the line in (1) point slope form and (2) slope intercept form for each situation
A. Slope $=3$ Point $(-2,5)$
B. Points $(-2,7)$ and $(12,0)$

$$
\begin{aligned}
& \text { A. } y-5=3(x+2) \text { point slope } \\
& \begin{array}{r}
y-5=3 x+6 \\
+5
\end{array} \\
& y=3 x+11 \text { slope interrupt }
\end{aligned}
$$

B.

$$
\begin{aligned}
& m=\frac{0-7}{12--2}=\frac{-7}{14}=-\frac{1}{2} \\
& (-2,7) \\
& y-7=-\frac{1}{2}(x+2) \\
& y-7=-\frac{1}{2} x-1
\end{aligned}
$$

$$
\begin{aligned}
& +7+7 \\
& y=-\frac{1}{2} x+6 \\
& (12,0) \\
& y-0=-\frac{1}{2}(x-12) \\
& y=-\frac{1}{2} x--6 \\
& y=-\frac{1}{2} x+6
\end{aligned}
$$

$$
\begin{aligned}
& \text { (11) } \begin{array}{l}
(4,-3)(-5,-2) \\
m=\frac{-2-3}{-5-4}=-\frac{1}{9}(x-3= \\
y+3=\frac{-1}{9} \\
y+3=-\frac{1}{9} x+\frac{4}{9} \\
-3 \\
y=-\frac{1}{9} x-\frac{23}{9}
\end{array}
\end{aligned}
$$

use otherpoint $(-5,-2)$

$$
\begin{array}{r}
y+2=\frac{-1}{9}(x+5) \\
y+2=\frac{-1}{9} x-\frac{5}{9} \\
-2 \quad-2 \\
y=\frac{-1}{9} x-\frac{23}{9}
\end{array}
$$



Quiy

$$
2,6,18
$$

Bellwork $y=m x+b$
Write the equation of the line in (1) point slope form and (2) slope intercept form for each situation:
$\underset{\text { B. Points }(-2,7) \text { and }(12,0))}{\text { A. Slope }=3} \underset{\text { Point }(-2,5)}{x_{1}, y_{1}} \quad y-y_{1}=m\left(\underline{x}-x_{1}\right)$
A. $y-5=3(x+2)$

$$
\begin{gathered}
y-5=3 x+6 \\
+5+5 \\
y=3 x+11
\end{gathered}
$$

B. $\frac{0-7}{12-2}=\frac{-7}{14}=\frac{-1}{2} O R-0.5$

$$
(12,0)(-2,7)
$$

$y-0=\frac{-1}{2}(x-12) \quad p / s$ form $y=\frac{-1}{2} x+6$ slope intercept

3)


$$
\begin{aligned}
& \text { (5) }-5,-5 \quad m=\frac{9}{5} \\
& y+5=\frac{9}{5}(x+5) \\
& y+5=\frac{9}{5} x+9 \\
& -5 \quad-5 \\
& y=\frac{9}{5} x+4
\end{aligned}
$$

$$
\begin{aligned}
& (13)(-4,-4)(5,-5) \\
& m=\frac{-5--4}{5--4}=\frac{-1}{9}
\end{aligned}
$$

$$
\begin{gathered}
y+4=\frac{-1}{9}(x+4) \quad \text { p/s } \\
y+4=\frac{-1}{9} x-\frac{4}{9} \\
-4 \\
y=-\frac{1}{9} x-\frac{40}{9}
\end{gathered}
$$

