## Algebra II Worksheet \#2 Unit 2 selected solutions

Write the equation of each line described. If the line is oblique, use slope-intercept form.

1. The horizontal line through (3,-5).

$$
y=-5
$$

5. The line with slope 2 and $y$-intercept 1.

$$
y=2 x+1
$$

7. The line through $(3,1)$ and $(0,5)$.

$$
y=\frac{-4}{3} x+5
$$

$$
m=\frac{5-1}{0-3}=\frac{-4}{3} \quad b=5
$$

8. The line with slope $2 / 3$ through (6, 2). $\quad y=\frac{2}{3} x-2$

$$
\begin{aligned}
& y-2=\frac{2}{3}(x-6) \\
& y-2=\frac{2}{3} x-4
\end{aligned}
$$

12. The line through $(-1,2)$ and $(1,5)$.

$$
y=\frac{3}{2} x+\frac{7}{2}
$$

$$
\begin{aligned}
m=\frac{5-2}{1+1}=\frac{3}{2} \quad y-5 & =\frac{3}{2}(x-1) \\
y-5 & =\frac{3}{2} x-\frac{3}{2}
\end{aligned}
$$

