Algebra II Review Unit 2 page 1
Graph each of the following equations. (Use the equation to label the graph.)

1. $\mathrm{y}=-3 \mathrm{x}+5$
2. $x=-3$

3. $x-4 y=12$
4. $\mathrm{y}=5$


Find the equation of each of the lines graphed below. If the line is oblique, use slope- intercept form.

5. a: $\qquad$
6. $b$ : $\qquad$
7. c : $\qquad$
8. d : $\qquad$

## Algebra II Review Unit 2 page 2

Write the equation of each line described below. If the line is oblique, then write the slopeintercept equation.
9. The line through $(-2,5)$ that has slope $m=-3 / 2$.
10. The line through $(-3,4)$ and $(6,-2)$. $\qquad$
11. The horizontal line through $(-2,5)$.
12. The line through $(3,-1)$ that is parallel to $2 x-3 y=3$.
13. The line through $(-2,0)$ that is perpendicular to $x+2 y=0$.

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Solve the following system of equations graphically.
14.

$$
\begin{aligned}
3 x-2 y & =14 \\
x+3 y & =12 \\
x & = \\
y & =
\end{aligned}
$$



Solve the following systems using the substitution method.
15. $3 x+5 y=9$
$\mathbf{x}=$ $\qquad$ 16. $4 x-3 y=1$
$\mathbf{x}=$ $\qquad$

$$
y=2 x+7
$$

$$
\mathbf{y}=
$$

$\qquad$

$$
y=2 x-3
$$

$$
\mathbf{y}=
$$

$\qquad$

Solve the following systems using the multiplication-addition method.
17.

$$
\begin{array}{ll}
2 x+5 y=1 & x= \\
3 x-2 y=11 & y=
\end{array}
$$

18. $7 x+6 y=12$
$\mathbf{x}=$ $\qquad$

$$
3 x+10 y=7 \quad y=
$$

Algebra II Review Unit 2 page 4
Solve each of the problems algebraically. Use a system of 2 equations with 2 variables.
19. A collection of 50 ordinary dimes and quarters is worth $\$ 7.70$. How many coins of each type are there in the collection?
20. Coffee worth $\$ 1.50$ per pound is mixed with coffee worth $90 ¢$ per pound to produce a 30 pound blend that is worth $\$ 1.06$ per pound. How many pounds of each type are in the mixture?

