NAME
DATE
PER.
RETEST REVIEW: SYSTEMS OF EQUATIONS
Solve each system by the method specified.

1) Solve by graphing.

$$
\begin{gathered}
3 x+4 y=12 \\
x+2 y=4
\end{gathered}
$$

Solution: $\qquad$

2) Solve by graphing.

| $y=3 x+4$ |  |
| :--- | :---: |
| and |  |
| $x$ $y$ <br> -3 -5 <br> -1 1 <br> 1 7 <br> 3 13 |  |

Equation (from table): $\qquad$


Solution: $\qquad$
3) Solve using matrices.
$2 x+5 y=17$
$6 x-5 y=-9$

Solution: $\qquad$
4) Solve using matrices.
$5 x-9 y=-3$
$4 x-3 y=6$

Solution:
5) Two lines have the given equations. At what point do they intersect?

$$
\begin{gathered}
y=2 x-1 \\
3 x-y=-6
\end{gathered}
$$

For each word problem, set up a system of equations, and solve for the value(s) indicated. 6 ) If 8 pens and 7 pencils cost $\$ 3.37$ while 5 pens and 11 pencils cost $\$ 3.10$, how much does each pen and pencil cost?

Equations: $\qquad$

Solution: $\qquad$
7) Timmy has 180 marbles, some plain and some colored. If there are 32 more plain marbles than colored marbles, how many colored marbles does he have?

Equations: $\qquad$
$\qquad$

Solution: $\qquad$
8) If ( $x,-3$ ) is a solution for the following system of equations, what is the value of $x$ ?

$$
\begin{aligned}
& 4 x-y=15 \\
& 3 x+y=6
\end{aligned}
$$

9) Holt bought a large pizza and a liter of drink for \$11, not including tax. If the price of the pizza, $p$, is 5 more than 3 times the price of the drink, $d$, write the system of linear equations that could be used to find the cost of the pizza and the drink. (do not solve)

Equations: $\qquad$

Answers in random order: $3 \quad(4,0) \quad 74 \quad p+d=11$
0.15
$(-7,-15)$
0.29
$(3,2)$
$(1,3)$
$p=3 d+5$
infinitely many solutions

