## Lesson 14: Making More New, True Equations

- Let's practice combining like terms and working with horizontal and vertical lines.


## 14.1: Criss Cross'll Make You Jump

Match each equation with its graph.

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

A

B

C

D


## 14.2: They're Like Terms, Man

Rewrite each expression by combining like terms.

1. $11 s-2 s$
2. $5 t+3 z-2 t$
3. $23 s-(13 t+7 t)$
4. $7 t+18 r+(2 r-5 t)$
5. $-4 x+6 r-(7 x+2 r)$
6. $3(c-5)+2 c$
7. $8 x-3 y+(3 y-5 x)$
8. $5 x+4 y-(5 x+7 y)$
9. $9 x-2 y-3(3 x+y)$
10. $6 x+12 y+2(3 x-6 y)$

## 14.3: Finding More Lines

For each system of equations:

- Solve the system of equations by graphing. Write the solution as an ordered pair.
- Write an equation that would represented by a vertical or horizontal line that also passes through the solution of the system of equations.
- Graph your new equation along with the system.

1. $\left\{\begin{array}{l}y=3 x+5 \\ y=-x+1\end{array}\right.$

The line representing $y=3 x+5$ is shown

2. $\left\{\begin{array}{r}y=\frac{1}{3} x-2 \\ y=x-6\end{array}\right.$ The line representing $y=\frac{1}{3} x-2$ is shown

3. $\left\{\begin{array}{r}2 x+3 y=10 \\ x+y=3\end{array}\right.$

The line representing $2 x+3 y=10$ is shown


