Practice Quiz C: Solving for a variable of interest and Graphing Name $\qquad$
Solve the equation for $y$ and then graph the equation. Give the functions domain, range, and the interval of increase of decrease.

$$
\text { 1. } 3 x+2 y=10
$$



Solve the equation for y and then make a table with the given values of $x$.
3. $4 y-8 x=12$

| $x$ | $y$ |
| :--- | :--- |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |

2. $-3 x+3(y+1)=6$


Graph the equation and then solve for $y$ or solve the equation for y and then graph
4. $y-1=-2(x+1)$


Solve the equation for y
5. $\frac{x}{5}+2 y=12$

Solve the proportion for x
6. $\quad \frac{x}{3}=\frac{7}{2}$

Airplane Travel: Use the formula $\mathbf{D}=\mathbf{R T}$, where $\mathbf{D}$ is the distance traveled at a rate of $\mathbf{R}$ for time $\mathbf{T}$
7. Solve the equation $\mathrm{D}=\mathrm{RT}$ for R .
8. If a plane travels 3000 miles in 5 hours, what is the value of R.
9. Assuming the time it takes to travel 3000 miles increases, what happens to the value of R.

Perimeter: Use the formula $\mathbf{P}=\mathbf{2 L}+\mathbf{2 W}$, where $\mathbf{P}$ is the Perimeter, $L$ is the length, and $W$ is the width.
9. Solve the equation $\mathbf{P}=\mathbf{2 L}+\mathbf{2 W}$ for $\mathbf{W}$
10. A pump can fill a 750-gallon tank in 35 minutes. How long will it take to fill a 1000-gallon tank with this same pump?

