

## Graphs of

Proportional Relationships
Today's Learning Targets:
5.14 - I can explain why an equation in the form $\mathrm{y}=\mathrm{mx}$ is a special form of slope-intercept and how it is unique on the graph.
5.15 - I can graph a proportional relationship on the coordinate plane.


## $y=3 x$

## Table or <br> $y=m x+b ?$



Find the unit rate, write an equation, and graph the relationship.

## A car drives 300 miles in 6 hours.



Determine if the equation represents a proportional relationship, then graph the equation.

$$
\begin{array}{cc}
y=4 x-1 & y=-2 x \\
\text { propotiona? }
\end{array}
$$




Determine if the equation represents a proportional relationship, then graph the equation.

$$
y=4
$$

proportional?


$$
4 / 3 x+y=-3
$$

proportional?


Determine if the equation represents a proportional relationship, then graph the equation.

$$
\begin{aligned}
& y=1 / 2 x \\
& \text { proportional? }
\end{aligned}
$$

$y=-3 x+5$
proportional?



