PARALLEL \& PERPENDICULAR LINES - Day 2

Find the slopes of the lines containing each segment.

| Segment | Slope |
| :---: | :---: |
| $\overline{\mathrm{AB}}$ |  |
| $\overline{\mathrm{BC}}$ |  |
| $\overline{\mathrm{CD}}$ |  |
| $\overline{\mathrm{DA}}$ |  |



What can you conclude about $\overline{\mathrm{AB}}$ and $\overline{\mathrm{CD}}$ ? Why?

What can you conclude about $\overline{\mathrm{DA}}$ and $\overline{\mathrm{AB}}$ ? Why?

1. Find the slope of a line that would be parallel to $2 x-3 y=-12$.
2. Find the slope of a line that would be perpendicular to $4 x+5 y=-15$.
3. Write the equation, in slope-intercept form, of a line that passes through the given point and is PARALLEL to the graph of the given equation.
$(4,5) ; \quad 5 x-y=-10$
4. Write the equation, in slope-intercept form, of a line that passes through the given point and is PERPENDICULAR to the graph of the given equation.
$(-9,-1) ; 3 x+4 y=8$
