Graphic Organizer for Problem-Based Courses Example

# Restate the problem or question/determine the type of problem

Find the equation of the line perpendicular to the line that passes through the point (3,-1).

# Identify Knowns and Unknowns

## Known

Line 1:

Line 2: passes through

## Unknown

Slope 2: M2=

Y-int. 2: b2=

# Identify Formula

, M is the slope, b is the Y-int;

# Other Notes

1 lines: Slopes are negative reciprocals

# To find the Answer.

# Show your work and write an explanation for each step.

## Step 1

Find M2. . . Find slope of line 2 from slope of line 1.

## Step 2

Find b2. . Set up equation for line 2 with slope of line 2.

## Step 3

, . Use the point to find b (y-int) of line 2.

## Step 4

, . Simplify.

## Step 5

, . Simplify to find b of line 2

## Step 6

, Use M2 and b2 to write equation!

## Answer (Examine your answer. Is it correct? Is it reasonable?)

Additional Info

For more information, visit the Center for Academic Success in B-31 Coates Hall, call (225)578-2872, or visit [lsu.edu/cas](https://lsu.edu/cas/).