The following problems ramp up from having a graph provided for you, to you making your own graph, to you doing a problem without the help of a graph.

Level:

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| a) Find the equation of the line with a slope of 1, through the point (5, 4) | | | |
| Identify the slope, and your point: | | | Sketch: |
|  |  |  |
| Put in your slope: | | |
| Put in your point and solve for “b” | | |
| Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | |

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| b) Find the equation of the line with a slope of , through the point (9, 4) | | | |
| Identify the slope, and your point: | | | Sketch: |
|  |  |  |
| Put in your slope: | | |
| Put in your point and solve for “b” | | |
| Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | |

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| c) Find the equation of the line with a slope of 2, through the point (2, 8) | | | |
| Identify the slope, and your point: | | | Sketch: |
|  |  |  |
| Put in your slope: | | |
| Put in your point and solve for “b” | | |
| Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | |

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| d) Find the equation of the line with a slope of , through the point (6, 4) | | | |
| Identify the slope, and your point: | | | Sketch: |
|  |  |  |
| Put in your slope: | | |
| Put in your point and solve for “b” | | |
| Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | |

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| e) Find the equation of a line that has a slope of 2 and goes through the point (14,4). | | | f) Find the equation of a line that has a slope of -2 and goes through the point (8, 0). | | |
| Identify the slope, and your point: | | | Identify the slope, and your point: | | |
|  |  |  |  |  |  |
| Put in your slope: | | | Put in your slope: | | |
| Put in your point and solve for “b” | | | Put in your point and solve for “b” | | |
| Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | | Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | |

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| e) Find the equation of a line that has a slope of and goes through the point (20,15). | | | f) Find the equation of a line that has a slope of and goes through the point (15,3). | | |
| Identify the slope, and your point: | | | Identify the slope, and your point: | | |
|  |  |  |  |  |  |
| Put in your slope: | | | Put in your slope: | | |
| Put in your point and solve for “b” | | | Put in your point and solve for “b” | | |
| Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | | Equation: \_\_\_\_\_x \_\_\_\_\_\_ | | |