

The deadline for all homework assignments is the one specified in Archie before 11:59 pm. As discussed in class, It must be correctly uploaded in order to be graded. Show all your work and justifications.

For Exercises 73–82,

- a. Use slope-intercept form to write an equation of the line that passes through the given point and has the given slope.  
b. Write the equation using function notation where  $y = f(x)$ .

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| 73. $(0, 9); m = \frac{1}{2}$<br>a. $y = \frac{1}{2}x + 9$<br>b. $f(x) = \frac{1}{2}x + 9$                       | 74. $(0, -4); m = \frac{1}{3}$<br>a. $y = \frac{1}{3}x - 4$<br>b. $f(x) = \frac{1}{3}x - 4$  | 75. $(1, -6); m = -3$<br>a. $y = -3x - 3$<br>b. $f(x) = -3x - 3$ |
| 77. $(-5, -3); m = \frac{2}{3}$<br>a. $y = \frac{2}{3}x + \frac{1}{3}$<br>b. $f(x) = \frac{2}{3}x + \frac{1}{3}$ | 78. $(-4, -2); m = \frac{3}{2}$<br>a. $y = \frac{3}{2}x + 4$<br>b. $f(x) = \frac{3}{2}x + 4$ | 79. $(2, 5); m = 0$<br>a. $y = 5$<br>b. $f(x) = 5$               |
| 81. $(3.6, 5.1); m = 1.2$<br>a. $y = 1.2x + 0.78$<br>b. $f(x) = 1.2x + 0.78$                                     | 82. $(1.2, 2.8); m = 2.4$<br>a. $y = 2.4x - 0.08$<br>b. $f(x) = 2.4x - 0.08$                 |  |
| 76. $(2, -8); m = -5$<br>a. $y = -5x + 2$<br>b. $f(x) = -5x + 2$   | 80. $(-1, -3); m = 0$<br>a. $y = -3$<br>b. $f(x) = -3$                                       |  |

For Exercises 83–86,

- a. Use slope-intercept form to write an equation of the line that passes through the two given points.  
b. Then write the equation using function notation where  $y = f(x)$ .

83.  $(4, 2)$  and  $(0, -6)$     84.  $(-8, 1)$  and  $(0, -3)$     85.  $(7, -3)$  and  $(4, 1)$

86.  $(2, -4)$  and  $(-1, 3)$