**This is a graded discussion: 4 points possible**

**due Jun 22**

# Week 3 - Discussion

2323 unread replies.2323 replies.

Your initial discussion thread is due on Day 3 (Thursday) and you have until Day 7 (Monday) to respond to your classmates. Your grade will reflect both the quality of your initial post and the depth of your responses. Refer to the Discussion Forum Grading Rubric under the Settings icon above for guidance on how your discussion will be evaluated.

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|  **Parallel and Perpendicular** |

* Read the following instructions in order to complete this discussion, and review the [example](https://ashford.instructure.com/courses/3058/files/431680/download?wrap=1) of how to complete the math required for this assignment:
* Given an equation of a line, find equations for lines parallel or perpendicular to it going through specified points. Find the appropriate equations and points from the table below. Simplify your equations into slope-intercept form.
* Use your assigned number to complete.

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| **If your assigned number is:** | **Write the equation of a line parallel to the given line and passing through the given point.** | **Write the equation of a line perpendicular to the given line and passing through the given point.** |
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| 1 | y = ½ x + 3; (-2, 1) | y = ½ x + 3; (-2, 1) |
| 2 | y = -2x – 4; (1, 3) | y = -2x – 4; (1, 3) |
| 3 | y = ¼ x – 2; (8, -1) | y = ¼ x – 2; (8, -1) |
| 4 | y = -x + 3; (-2, -2) | y = -x + 3; (-2, -2) |
| 5 | y = -⅓ x – 4; (-6, -3) | y = -⅓ x – 4; (-6, -3) |
| 6 | y = -½ x + 1; (4, 2) | y = -½ x + 1; (4, 2) |
| 7 | y = ¾ x – 1; (4, 0) | y = ¾ x – 1; (4, 0) |
| 8 | y = 3x + 3; (1, 1) | y = 3x + 3; (1, 1) |
| 9 | y = -4x – 5; (0, -1) | y = -4x – 5; (0, -1) |
| 10 | y = -⅔ x + 2; (9, -3) | y = -⅔ x + 2; (9, -3) |
| 11 | y = 2x – 1; (2, -2) | y = 2x – 1; (2, -2) |
| 12 | y = -3x – 6; (-1, 5) | y = -3x – 6; (-1, 5) |
| 13 | y = x + 4; (-7, 1) | y = x + 4; (-7, 1) |
| 14 | y = ¾ x – 1; (3, 1) | y = ¾ x – 1; (3, 1) |
| 15 | y = 3x + 3; (-1, -1) | y = 3x + 3; (-1, -1) |
| 16 | y = -4x – 5; (-1, 0) | y = -4x – 5; (-1, 0) |
| 17 | y = -⅔ x + 2; (6, 3) | y = -⅔ x + 2; (6, 3) |
| 18 | y = 2x – 1; (-2, 2) | y = 2x – 1; (-2, 2) |
| 19 | y = -3x – 6; (-3,2) | y = -3x – 6; (-3,2) |
| 20 | y = x + 4; (1, -7) | y = x + 4; (1, -7) |
| 21 | y = ½ x + 3; (4, -1) | y = ½ x + 3; (4, -1) |
| 22 | y = -2x – 4; (2, -3) | y = -2x – 4; (2, -3) |
| 23 | y = -¼ x – 2; (-8, 1) | y = -¼ x – 2; (-8, 1) |
| 24 | y = -x + 3; (2, 2) | y = -x + 3; (2, 2) |
| 25 | y = -⅓ x – 4; (3, 1) | y = -⅓ x – 4; (3, 1) |
| 26 | y = -½ x + 1; (-2, 3) | y = -½ x + 1; (-2, 3) |
| 27 | y = ¼ x + 1; (-4, 3) | y = ¼ x + 1; (-4, 3) |
| 28 | y = 5x - 1; (5,-8) | y = 5x - 1; (5,-8) |
| 29 | y = x + 7; (-7,1) | y = x + 7; (-7,1) |
| 30 | y = ½ x + 3; (-6, -7) | y = ½ x + 3; (-6, -7) |
| 31 | y = -2x + 5; (3,0) | y = -2x + 5; (3,0) |
| 32 | y = -⅓ x+ 3; (6, -4) | y = -⅓ x+ 3; (6, -4) |
| 33 | y = ⅔ x + 2; (6, -3) | y = ⅔ x + 2; (6, -3) |
| 34 | y = 2x; (-3,-3) | y = 2x; (-3,-3) |
| 35 | y = 5; (4,4) | y = 5; (4,4) |
| 36 | y = -x + 7; (-7,-1) | y = -x + 7; (-7,-1) |
| 37 | y = -5x - 1; (5,9) | y = -5x - 1; (5,9) |
| 38 | y = -¾ x – 1; (12, 5) | y = -¾ x – 1; (12, 5) |
| 39 | y = ⅔ x + 2; (-6, 3) | y = ⅔ x + 2; (-6, 3) |
| 40 | y = x; (0,0) | y = x; (0,0) |
| 41 | y = -⅔ x + 2; (3, 3) | y = -⅔ x + 2; (3, 3) |
| 42 | y = 2x + 3; (-2, -1) | y = 2x +3; (-2,-1) |
| 43 | y = -3x + 1; (6,1) | y = -3x + 1; (6,1) |
| 44 | y = x - 5; (-2,10) | y = x - 5; (-2,10) |
| 45 | y = ½ x - 3; (3, 1) | y = ½ x - 3; (3, 1) |

* Discuss the steps necessary to carry out each activity. Describe briefly what each line looks like in relation to the original given line.
* Answer these two questions briefly in your own words:
	+ What does it mean for one line to be parallel to another?
	+ What does it mean for one line to be perpendicular to another?
* Incorporate the following five math vocabulary words into your discussion. Use **bold** font to emphasize the words in your writing (**Do not write definitions for the words; use them appropriately in sentences describing your math work**.):
* Origin
* Ordered pair
* X- or y-intercept
* Slope
* Reciprocal

Your initial post should be 150-250 words in length. Respond to at least two of your classmates’ posts by Day 7 in at least a paragraph. Make sure you choose people who don’t have the same equations as you worked. Do you agree with how they used the vocabulary? Do their equations seem reasonable given what they started with?

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| Stuck on a problem? Don't skip that assignment – click the button to chat with a live tutor. It is free and here to help you now. | tutoring_button-1.png |

[Go to top of page](https://ashford.instructure.com/courses/3058/discussion_topics/73062)

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