Homework 10 (Due: Friday, November 4)

**Score:**

4 A 90-100% (17-20)

3 B 80-89% (14-16)

2 C 70-79% (10-13)

1 D 60-69% (5-9)

0 U 50-55% (0-4)

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| 1. Use the situation below for #s 1,5,9.Amelia is driving to her grandparents’ house at a constant rate. She travels 201 miles and it takes her 3 hours.Identify and interpret the slope. | 2. Use the situation below for #s 2,6,10.Kourtney has a new phone plan, where she pays per text message. She pays $14 for 200 text messages.Identify and interpret the slope. | 3. Use the situation below for #s 3,7,11.During practice, Lamar is able to throw the football at a constant rate. During 8 plays, he threw a total of 288 yards.Identify and interpret the slope. | 4. Solve the equation. Show your work.$$\frac{2}{3}x-8=-4$$ |
| 5. Create a table for the information from #1. | 6. Create a table for the information from #2. | 7. Create a table for the information from #2. | 8. Solve the equation. Show your work.$$x+3=-5x+11$$ |
| 9. Graph the information from #1. Include labels. | 10. Graph the information from #2. Include labels. | 11. Graph the information from #3. Include labels. | 12. Solve the equation. Show your work.$$2\left(x-3\right)=-2x+4$$ |
| 13. Explain how you know if something is proportional. | 14. Identify and interpret the slope as the unit rate of the graph below. | 15. Identify and interpret the slope as the unit rate of the table below.Jessie’s Job

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| **X****Hours worked** | 3 | 5 | 100 |
| **Y****Total pay** | 18 | 30 | 600 |

 | 16. Using the answers from #14 and #15, who makes more money? Explain how you know. |
| 17. Identify the slope of the graph. Show your work. | 18. Identify and explain the number of solutions.$$\frac{1}{2}y=2(\frac{1}{4}y-9)$$ | 19. The diameter of a fine strand of human hair is $3.4×10^{-5}$ meters. Write this number in standard form. | 20. Approximate $\sqrt{85}$ to the nearest tenth. Show your work. |
| What (if anything) do you still need more help with? |