1. Simplify $\frac{5}{4} - \frac{1}{6} + \frac{2}{3}$.
   Answer 1.____________________

2. Give an example of an irrational number.
   Answer 2.____________________

3. Simplify $\frac{1}{x + h} - \frac{1}{x}$.
   Answer 3.____________________

4. Factor $125x^3 + 64$ as completely as possible over the Reals.
   Answer 4.____________________

5. Fill in the blank: A polynomial of degree 2 with real coefficients factors over the Reals if the discriminant is ___.
   Answer 5.____________________

6. Sketch the graph of $y = -2|x + 1|$.
   Answer 6.____________________

7. Considering the graph below, on what day was the DJIA at its highest point in the past 12 months?
   Answer 7.____________________
8. Find the $x$-intercept(s) of the graph of $y = 6x^2 - 11x + 4$, if any exist. Answer 8. _______________

9. Find the slope if it is defined of the line that passes through $(−1, −2)$ and $(2, −1)$. Answer 9. _______________

10. Find an equation of the line that passes through $(−1, −2)$ and $(2, −1)$. Answer 10. _______________

11. Find an equation of the vertical line that passes through $(3, -1)$. Answer 11. _______________

12. Find the slope-intercept form of the equation of the line that has $x$-intercept at $x = 3$ and $y$-intercept at $y = 4$. Answer 12. _______________

13. Sketch the graph of $y = 3x - 1$. Answer 13. _______________
14. Solve \( \left| \frac{x - 11}{x - 5} \right| = 4 \). Answer 14.

15. Graph the solution of \( \left| \frac{x - 11}{x - 5} \right| \geq 4 \) on a number line. Answer 15.

16. Express your solution of \( \left| \frac{x - 11}{x - 5} \right| \geq 4 \) in inequalities. Answer 16.

17. Fill in the blank: Perpendicular lines have slopes that are _____. Answer 17.

18. Fill in the blank: Parallel lines have slopes that are _____. Answer 18.

19. Fill in the blank: All vertical lines have slopes that are _____. Answer 19.

20. Fill in the blank: All horizontal lines have slopes that are _____. Answer 20.