

Section 2

Solve each equation or inequality below. Make sure to give *all* solutions.

16. $7x + 6 \leq 34$

17. $2x^2 - 8 = 10$

18. $3x^2 + 15x = 0$

Answer each question below.

19. In the equation $y = 4x - 7$, find y when $x = -2$.

20. Graph the equation $y = 2x + 1$ on a coordinate plane.

21. Graph the equation $y + 3x = 4$ on a coordinate plane.

22. Find the x and y -intercepts of the graph of the equation $y = 5x - 10$.

23. Find the slope of the graph of the equation $y = 5x - 10$.

Simplify each expression below.

24. $13x^2y - 9x^2y$

25. $xy(x^2 + y^2)$

26. $\frac{q}{ps^3} - \frac{r}{ps^3}$

27. $\frac{x + y}{x^2 + 2xy + y^2}$

Answer each question below.

28. In the equation $y = ax^2 + bx + c$, find the value of y when $x = 2$, $a = 1$, $b = 3$, and $c = 5$.

29. Solve the equation $3n - n = b - 1$ for n in terms of b .

30. Solve the system of equations $\begin{cases} 4x - 2y = 10 \\ x + 2y = 15 \end{cases}$ for x and y .