

**Solve for x and write answer in term of set builder form?**

$$\begin{array}{lll}
28. |3x + 1| < 4 & 29. |x + 2| > 1 & 30. \left|\frac{1}{2}x - 1\right| \geq 2 \\
31. |5 - 2x| \geq 4 & 32. |7x + 1| > 3 & 33. \frac{1}{|x - 1|} < 2 \\
34. \frac{1}{|3x + 1|} \geq 5 & 35. \frac{3}{|2x - 1|} \geq 4 & \\
36. \frac{2}{|x + 3|} < 1 & & 
\end{array}$$

**Solve for 'x' and write answer in term of interval?**

$$\begin{array}{lll}
29. \frac{x}{x - 3} < 4 & 30. \frac{x}{8 - x} \geq -2 & 31. \frac{3x + 1}{x - 2} < 1 \\
32. \frac{\frac{1}{2}x - 3}{4 + x} > 1 & 33. \frac{4}{2 - x} \leq 1 & 34. \frac{3}{x - 5} \leq 2 \\
35. x^2 > 9 & 36. x^2 \leq 5 & \\
37. (x - 4)(x + 2) > 0 & 38. (x - 3)(x + 4) < 0 & \\
39. x^2 - 9x + 20 \leq 0 & 40. 2 - 3x + x^2 \geq 0 & 
\end{array}$$

**In Exercises 19-32, find the domain of the function.**

$$\begin{array}{ll}
19. f(x) = x^2 + 3 & 20. f(x) = 7 - x^2 \\
21. f(x) = \frac{3x + 1}{x^2} & 22. g(x) = \frac{2x + 1}{x - 1} \\
23. f(x) = \sqrt{x^2 + 1} & 24. f(x) = \sqrt{x - 5} \\
25. f(x) = \sqrt{5 - x} & 26. g(x) = \sqrt{2x^2 + 3} \\
27. f(x) = \frac{x}{x^2 - 1} & 28. f(x) = \frac{1}{x^2 + x - 2} \\
29. f(x) = (x + 3)^{3/2} & 30. g(x) = 2(x - 1)^{5/2} \\
31. f(x) = \frac{\sqrt{1 - x}}{x^2 - 4} & 32. f(x) = \frac{\sqrt{x - 1}}{(x + 2)(x - 3)}
\end{array}$$