

19. An arrow is shot upward from a platform 40 ft high with an initial velocity of 224 ft per sec. Its height h in feet after t seconds is given by the equation $h = -16t^2 + 224t + 40$.
At what times will the arrow be 824 ft above the ground?
20. The number y of students attending Nequa Valley High School between 1988 and 1996 can be approximated by the model $y = 45.28x^2 - 37.6x + 585$, where $x = 0$ corresponds to 1988. Based on this model, in what year did the school have about 1550 students?

Solve each inequality. Give the answer using interval notation.

21. $-8x \leq 12 - 2(x - 3)$

22. $x^2 + 4 > 5x$

23. $\frac{-5}{x-3} \geq 1$

24. $|2x - 1| < 3$

25. $|2x - 6| \geq 4$