

1. What is the domain of this function in interval notation? $f(x) = \sqrt{x + 9} - 11$
2. What is the y-intercept of this function, written as an ordered pair? $f(x) = 2^{x+4} - 21$
3. What is the equation of the horizontal asymptote? $f(x) = 2^{x+4} - 21$
4. What is the range of this function, in interval notation? $f(x) = (x + 2)^2 - 7$
5. What is the range of this function, in interval notation? $f(x) = 2^{x+4} - 21$
6. What is the range of this function, in interval notation? $f(x) = (x - 5)^2 + 2$
7. In how many ways can 5 people line up to get on the bus?
8. How many more ways can the Math Club choose a President, Vice President, and Secretary from a 14 member club, than the Science Club choose 3 members from the 15 member club to present at a National Conference?
9. Find the value of x . $4e^{x-5} - 7 = 37$
10. Find the value of m . $\log_4(3m + 1) = 3$