

3. A man jumps off a diving board into a pool. The equation $h(t) = -16t^2 + 40$ gives the height h in feet the man is above the pool t seconds after he jumps. How far above the pool is the diving board, and how long does it take the man to hit the water?

4. The rate of the current of a stream is 4 mph. Daniel rowed his boat downstream a distance of 9 miles and then back upstream to his starting point. If the complete trip took 10 hours, what was Daniel's rate in still water? (Hint: Solve for t in $d = rt$.)