# Algebra II 

4-8
Word Problems
Solve. (pg 199)

1) The sum of a number and its square is 72 . Find the number.
2) The hypotenuse of a right triangle is 25 m long. The length of one leg is 10 m less than twice the other. Find the length of each leg.

## Free Fall Formulas

$$
h=v t-16 t^{2} \quad h=v t-4.9 t^{2}
$$

17) A signal flare is fired upward from ground level with an initial speed of $294 \mathrm{~m} / \mathrm{sec}$. A balloonist cruising at a height of 2450 m sees it pass on the way up. How long will it be before the flare passes the balloonist on the way down?

Assignment:
Pg. 199
2-30 even
(skip 26)

