Name: $\qquad$ Date: $\qquad$

## Quadratic Equations

## Solve the following word problems using quadratic method :

a. The difference of squares of two numbers is 160 . The square of the smaller number is 6 times the larger number. Find the two numbers.
b. Find the value of $k$ for which the given quadratic equation has real and distinct root. ${K x^{2}}^{2} 2 \mathrm{x}+1=0$
c. Sum of the areas of two squares is 468 m 2 . If the difference of their perimeters is 24 m , find the sides of the two squares.

