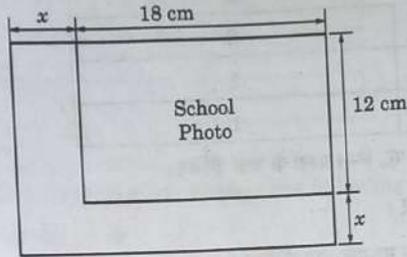




37. While designing the school year book, a teacher asked the student that the length and width of a particular photo is increased by  $x$  units each to double the area of the photo. The original photo is 18 cm long and 12 cm wide.

Based on the above information, answer the following questions :

- (I) Write an algebraic equation depicting the above information. 1  
(II) Write the corresponding quadratic equation in standard form. 1  
(III) What should be the new dimensions of the enlarged photo ? 2



OR

Can any rational value of  $x$  make the new area equal to  $220 \text{ cm}^2$  ?

38. India meteorological department observes seasonal and annual rainfall every year in different sub-divisions of our country.

