GRADE 7   Unit 6 Equations Sheet

1) Write an equation for each word problem below
   a. A number increased by twelve is twenty
   b. In total there of 20 stickers. Jims save 8 for himself and divide the rest up evenly with his 3 friends.
   c. Twenty more than triple a number is 22
   d. a number increased by 8 is 22

2) Solve the following using algebra (Show Work)
   a. $a + 2 = 7$ b. $b + 6 = 11$ c. $10 = c + 5$ d. $15 = d + 10$

3) Solve for the missing variable using algebra (Show work)
   a. $25 = a + 10$ b. $b + 6 = 24$ c. $30 = c + 20$ d. $2d + 6 = 18$

4) Model the balance and solve (Show Work)
   a. $x + 7 = 12$ b. $n + 18 = 22$ c. $2m = 26$ d. $27 = 9 + 3k$

5) Write the equations and solve each (Show work)
   a. 12 is two more than a number
   b. 9 added to a number is 21
   c. Four times a number is 24
   d. Triple a number increased by four is 28

6) A rectangle with a base of 8 cm has a perimeter of 44 cm. (Show work)
   a. Write an equation for perimeter.
   b. Solve the above equation to determine the height of the rectangle.

7) The area of a rectangle is 120 cm^2. Find the height of the rectangle if the base is 15 cm. (Show work)