Algebraic Equations Quiz Review

1. What’s the difference between an algebraic expression and an algebraic equation?
2. Write an algebraic equation for each sentence:
   1. Eight more than a number is 34.
   2. The product of 4 and a number is 36.
   3. The sum of a number and 9 is 13.
   4. A number divided by six then decreased by 5 is 45
3. Solve the following One-step Equations **using balancing method** (Show all your steps):

|  |  |  |
| --- | --- | --- |
| * 1. x + 5 = 15 | * 1. y - 15 = 25 |  |
|  |  |  |

1. Solve the following Two-step Equations **using balancing method** (Show all your steps):

|  |  |  |
| --- | --- | --- |
| * 1. 3p + 2 = 22 | * 1. 2x – 5 = 11 |  |
|  |  |  |

1. For the following problems**, choose a variable**, **write an equation for the situation**, and **use algebra to solve** the equation.
   1. A cycle shop rents bicycles for an $18 flat fee plus $3 per hour. Nino paid $39. For how long did Nino rent the bicycle?
   2. Alli spent half of her allowance going to the movies. She washed the family car and earned $7. What is her weekly allowance if she ended up with $16?