Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_

Mr. Tallman Math 7

**Do Now**

**Solve the following equations. Only check questions 1 and 3.**

|  |  |
| --- | --- |
| 1) | 2) |
| 3) | 4) |

**Fill in the blank to complete each equation.**

|  |  |  |
| --- | --- | --- |
| 5) \_\_\_\_\_\_\_ | 6) \_\_\_\_\_\_\_\_\_\_\_ | 7) \_\_\_\_\_\_\_\_\_ |

**Lesson #10 – Solving One Step Equations involving Multiplication and Division**

**Equations** are mathematical sentences in which two **expressions are equal**.

**Algebraic Equations** are equations that involve both numbers and variables.

Examples of **Algebraic Equations**:

We use different mathematical properties in order to solve an equation for a given variable.

**Multiplication Property of Equality:** If A = B, then

Example 1) Solve and check:

**Division Property of Equality**: If

Example 2: Solve and Check:

Example 3)

Part A) Brett solved the equation . What mathematical property did Sean use to find the solution?

Part B) Solve and check the equation from Part A.

Example 4) Maria solved the equation and found that . Is James correct? If he is not correct, solve the equation and find the correct value of x.

Example 5) Josh saved $10 dollars a week for a certain number of weeks in order to pay for a new video game. The video game costs $60.

Part A) Write an equation that models this situation. Be sure to include a let statement.

Part B) Solve your equation from part A to determine how many weeks Josh saved money.

**Now, You Try!**

**Solve and Check each equation.**

|  |  |
| --- | --- |
| 6) | 7) |
| 8) | 9) |
| 10) | 11) |
| 12) | 13) |

14) Hannah solved the equation and said that . Is Hannah correct? If not, correct her error by solving the equation.

15) Jordan wants to sign up for a certain music streaming service. That music streaming service costs $9 per month for unlimited streaming without ads. After a certain number of months, Jordan paid $81 and then canceled his subscription. Write and solve an equation to determine for how many months his subscription was active. Be sure to include a let statement.