Jakarta International School

8th Grade – AG1

Practice Test - BLACK

Unit 1: Solving Linear Equations

Name: _____

Date: _____

Score: $\frac{\quad}{22}$

Goal 1: Students understand the meanings of operations and how they relate to one another, especially as a means to solve equations and evaluate expressions.

Clearly show work. Check Carefully!

Solve each equation.

1. $\frac{x-2}{4}-\frac{3x+6}{8}=-2$ (3 points)	2. $5x+2=3x+(8x+2)$ (3 points)
3. Solve for w if $\frac{w}{x}+Pw=R$ Leave no more than 1 division sign or fraction bar in your answer (2 points)	4. Find two numbers x and y such that xy, $\frac{x}{y}$, and $x+y$ are equal. (3 points)

5. A number, y, is 125% of another number x. What percent of 8y is 5x? (2 points)

6. Given the positive integers w, x, y, z with $\frac{w}{x} < \frac{y}{z} < 1$; arrange in order of increasing absolute value the five quantities: $\frac{x}{w}, \frac{z}{y}, \frac{xz}{wy}, \frac{x+z}{w+y}, 1$ (3 points)

7. The largest of n consecutive integers is j. Represent in terms of j the smallest integer S. (2 points)

8. x and y are real numbers such that $0 < x < y$. Tell whether the statement is sometimes true, always true, or never true. If it is sometimes true, give a set of values for which it is true and a set of values for which it is false. (2 points)

$$-x^2 < -xy$$