Jakarta International School

7th Grade

Practice Test - Green

Solving Multi-Step Equations

Name:

_____

Date:

_____

Score: $\overline{33}$

Clearly show required work. Check Carefully!

1) Complete the table below.

Solve each equation and **show all working out.**	**Check.**
a) $\dfrac{3}{5}p + 24 = 36$	[3 marks]
b) $-11 = 4 - 3a$	[3 marks]

c) $2(x-1)-9x=-9$

[3 marks]

d) $3(3w+8)=6(w-2)$

[3 marks]

e) $-40+(2x+5)+x=-5$

[3 marks]

2. The equation $10+5x=75$ can be used to solve the following problem. EXPLAIN WHY.

The fine for speeding is in dollars, $5 for every km/h over the speed limit, plus a $10 processing fee. If Mr. Leon was caught speeding and was fined $75, by how much was he exceeding the speed limit?   (2 marks)

3. For each problem, follow the four step problem solving process.   (4 marks per problem)

1. Define a variable
2. Write an equation
3. Solve your equation. Write your answer in a meaningful way.
4. Check your answer

A. Find 3 consecutive integers whose sum is -15.

B. The perimeter of a rectangular garden is 40 meters. The width is 2 meters more than one-half of the length. Find the length and width.

C. In the parking lot at a truck stop there were six more cars than 18-wheel trucks. There were 134 wheels in the parking lot. How many cars were there? How many trucks were there?

D. A refrigerated truck leaves a rest stop travelling at a steady rate of 56 miles per hour. A car leaves the same rest stop $\frac{1}{4}$ hour later, following the truck at a steady rate of 64 miles per hour. How long after the truck leaves the rest stop will the car overtake the truck?