EQUATIONS

Name:

BAM Indicator: Solve linear equations in one unknown

1. Solve these equations

a)
$$8k = 24$$

b)
$$x - 17 = 23$$

c)
$$4p - 6 = 2$$

d)
$$10v + 6 = 46$$

e)
$$7 = 4y + 1$$

f)
$$3(x-2) = 21$$

g)
$$\frac{b}{7} + 3 = 11$$

h)
$$\frac{x+2}{3} = 4$$

k = ____

2. Amanda solves the equation 6x + 9 = 57. She gets the answer x = 0.5. Do you agree with Amanda? Explain your answer.

3. In a class of 30 students, there are four more girls than boys.

- a) Using x as the number of boys, write down an equation
- b) Solve the equation and find the number of girls in the class.

_____ girls

M

| 4. | The formula $v =$ | u + at describes | connections | between |
|----|-------------------|------------------|-------------|---------|
| | | | | |

- u: starting velocity
- a: acceleration
- t: time
- v: final velocity
- a) In a particular situation, u = 0, v = 49 and a = 9.8. Substitute these numbers into the formula to create an equation.
- b) Solve the equation to find the value of *t*

5. Look at the following equations:

$$4x + 1 = 37$$
 $\frac{x-1}{2} = 4$ $4(2x + 1) = 40$ $\frac{x}{2} - 1 = 3.5$

$$4(2x + 1) = 40$$

$$\frac{x}{2} - 1 = 3.5$$

Which is the odd one out? Put a ring around the one that is. Give reasons for your answer.

Overall, I think my success level is:

Low High 0000

F = Fluency

R = Reasoning P = Problem-solving A = Application

M = Misconception

| Q | EQUATIONS | 0 | (3) |
|---|---|---|-----|
| | I know how to solve an equation by balancing both sides | | |
| | I can solve a one-step equation | | |
| | I can solve a two-step equation | | |
| | I can solve a three-step equation | | |
| | I know how to deal with fractions as solutions | | |
| | I can construct an equation from given information | | |

Improvements I could make:

| Mathematical presentation | Method | Accuracy | Units |
|---------------------------|--------|----------|-------|