Grade 7 Math **Chapter 6 PRACTICE TEST**

Name: _____

Section A:

1.

Put the letter of the best response in the space provided. (2 Marks each)

7PR4.6

	Which is an equation?		
	Α.	2-x	
<	В.	j - 3 = 2	
	C.	3x + 4	
	D.	4 <i>z</i>	

Sally was asked to use systematic trial to solve the equation 4n + 1 = 25. She tried n = 3. She 2. 7PR7.2 4(3)+1 noticed her answer was:

		(21)	
		A. Correct IZ	1.)
		B Too large	2)
	(C. Too small	2.)
		D. Undefined	3.)
			4.)
7PR7	3.	Solve: $4x = 16$	5.)
		A. 2 B. 4	6.)
		C. 12	7.)
		D. 64	8.)
			9.)
7PR3	4.	What would Sam's first step be to solve $3x + 2 = 11$ algebraically?	10.)
		A. Add 2 to both sides	
		B. Add 3 to both sides.	
		C. Subtract 2 from both sides.	
		D. Subtract 3 from both sides.	

7PR3

5.

What is the equation modeled by the algebra tiles?





7PR6.1 6. What is the **solution** to the equation modeled by algebra tiles below?



7PR4

7.

"4 less than double a number is 10"

Α.	4 - 2n
В.	4 - 2n = 10
C.	2n - 4 + 10
D.	2n - 4 = 10

What equation represents:



7PR6

9. Overnight the temperature dropped 7°C to -1°C. Write an equation for this situation.

A.
$$x + 7 = 1$$

B. $x - 7 = -1$
C. $x + 1 = 7$
D. $x - 1 = -7$

7PR3

10. Which of the following equations is x = -2 a solution?

A.
$$x-3 = -5$$

B. $x+1 = 3$
C. $x+2 = 1$
D. $x+3 = -1$

Part B:

- 7PR4.6 Complete all work in the space provided. Show <u>all workings</u> to receive full marks. (30 Marks)
 - 7PR3

 In the algebraic expression below identify the constant, numerical coefficient and variable. (3 marks)

4m – 6



7PR7.3 2. Solve the equation 2x + 10 = 48 using the **pan balance** method. (3 marks)



3. Solve the following using **algebra tiles**.

A) x - 1 = -3 (2 marks)







5. Solve the following equations **algebraically**. Be sure to show all your workings to receive full marks.



E)
$$-2 + y = 10$$
 (2 marks)
 $+2$ $+2$
 42
 42
 $5v + 5 = 35$ (3 marks)
 $5v = \frac{30}{5}$
 $5v = \frac{30}{5}$
 $5v = 6$

7PR3.3

6. Daniel agreed to shovel Ms. Bat's driveway for \$12 an hour. He did such a good job that she gave him a bonus of \$15. Daniel earned \$75.

7PR6.4/ 6.5

A. Write the equation you can use to solve the problem. (1 mark) h = # of h o vr SI = h + 15 = 75



B. Solve the equation to determine how many hours Daniel spent shoveling and use a method of your choice. Be sure to show your workings for full marks. (3 marks)



60+15

Daniel spent 5 hours Shoveling.