Grade 7 Math Chapter 6 PRACTICE TEST

Name: $\qquad$

## Section A:

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

1. Which is an equation?

D. $4 z$
2. Sally was asked to use systematic trial to solve the equation $4 n+1=25$. She tried $n=3$. She noticed her answer was:

1271


13

| 1.) |  |
| :--- | :--- |
| 2.) |  |
| 3.$)$ |  |
| 4.$)$ |  |
| 5.) |  |
| 6.$)$ |  |
| 7.$)$ |  |
| 8.) |  |
| 9.) |  |
| 10.$)$ |  |

4. What would Sam's first step be to solve $3 x+2=11$ algebraically?
A. Add 2 to both sides
B. Add 3 to both sides.
C. Subtract 2 from both sides.
D. Subtract 3 from both sides.
5. What is the equation modeled by the algebra tiles?

$\square=$ positive
$\square=$ negative
A. $\quad 3 x-4=-7$


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


7PR4
7. What equation represents:
"4 less than double a number is $10 "$
A. $4-2 n$
B. $4-2 n=10$
C. $\quad 2 n-4+10$
D. $2 n-4=10$
8. If $n=6$ which scale will be balanced?

9. Overnight the temperature dropped $7^{\circ} \mathrm{C}$ to $-1^{\circ} \mathrm{C}$. Write an equation for this situation.

| A. | $x+7=1$ |
| :--- | :--- |
| B. | $x-7=-1$ |
| C. | $x+1=7$ |
| D. | $x-1=-7$ |

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

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

## Part B:

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

$$
4 m-6
$$

A) Constant $\qquad$ B) Numerical Coefficient $\qquad$ C) Variable $\qquad$

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

3. Solve the following using algebra tiles.
A) $x-1=-3 \quad(2$ marks $)$


$$
x=-2
$$

 full marks.

B) $24=3 \mathrm{k}(2$ marks $)$

$$
\begin{aligned}
& 3 \frac{3}{3} \\
& k=8
\end{aligned}
$$

C) $\frac{w^{x-4}}{4}=12 \quad$ (2 marks)
D) $x-8=-20$
(2 marks)

E) $-2+y=10 \quad$ ( 2 marks)
D)


$$
\frac{5 v}{5}=\frac{30}{5}
$$


6. Daniel agreed to shovel Ms. Bat's driveway for $\$ 12$ an hour. He did such a good job that she 7PR6.4/ gave him a bonus of $\$ 15$. Daniel earned $\$ 75$.
6.5
A. Write the equation you can use to solve the problem. (1 mark)

$$
\begin{aligned}
& h=\sharp o f \text { hour } \\
& 12 h+15=75
\end{aligned}
$$

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)

$$
\begin{array}{r}
12 h+15=75 \\
-15=-15
\end{array}
$$

Daniel spent Shows
 Shoveling.
C. Verify your solution. (2 mark)
$12 h+15=$ $12(5)+15$ $60+15$ 75


