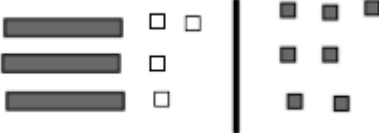


Part A – Multiple Choice

1. Which expression matches the following: a number decreases by 5
 (a) $v - 5$ (b) $h + 5$ (c) $5 + d$ (d) $5 - f$
2. What is the numerical coefficient for the expression: $3x - 9$
 (a) 1 (b) x (c) 3 (d) -9
3. Which equation matches the statement:
 triple the number of people increased by 4 is 25.
 (a) $3p - 4 = 25$ (b) $p + 4 = 25$ (c) $p - 4 = 25$ (d) $3p + 4 = 25$
4. Write the expression for the following input/output table
- | | | | | | |
|-----------|---|---|----|----|----|
| Input (n) | 1 | 2 | 3 | 4 | 5 |
| Output | 1 | 9 | 17 | 25 | 33 |
- (a) n (b) $8n - 7$ (c) $8n + 7$ (d) $8n$
5. When simplified, $k + k + 2k + k$ equals:
 (a) $5k$ (b) k^4 (c) $k + 5$ (d) k^4
6. The algebra tiles represent which of the following equations:
 (a) $3x - 4 = 7$
 (b) $-3x + 4 = -7$
 (c) $3x, -4, 7$
 (d) $3x + 4 = 7$
- 
7. When evaluated for $y = 5$, $8y + 6$ equals:
 (a) 91 (b) 19 (c) 85 (d) 46
8. Which of the following situations is suitable for the expression $6b + 10$
 (a) Kim earns \$6 dollars per hour on weekdays and \$10 per hour on weekends
 (b) If the number of students in the class are increased by 10, there will be 6 students
 (c) The vacuum cleaner rental costs \$10 plus \$6 for each hour
 (d) The cost of the book is \$10 less than 6 times last years cost
9. The expression for 7 less than a number is:
 (a) $7 - n$ (b) $n - 7$ (c) $7n$ (d) $n + 7$
10. In order to do well in class I must do which if the following:
 (a) Talk to friends (b) Pay attention (c) Eat (d) Not copy Notes

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Part B – Must show work in order to obtain full value.

1. Write an algebraic expression for each statement.

- (a) a product of 6 and a number
- (b) Six more than 9 times a number
- (c) Triple a number and increase by eleven
- (d) Five is subtracted **from** three times a number

2. There are n the number of pencils in the pencil case.

(a) Write a relation for the number of pencils you have, if you have 5 pencil cases.

(b) How many pencils do you have if there are 40 pencils in each pencil case? (Show work)

3. Write an **equation** for each sentence.

(a) Ten more than a number is 22

(b) A number reduced by eight is 13.

4. Simplify and evaluate the following (MUST SIMPLIFY FIRST....collect like terms)

(a) $10r + 4y - 2r + 20 + 2y + r$ where $r = 1$ and $y = 2$

5. (a) Complete an input/output table for the relation $3n - 2$ related to n

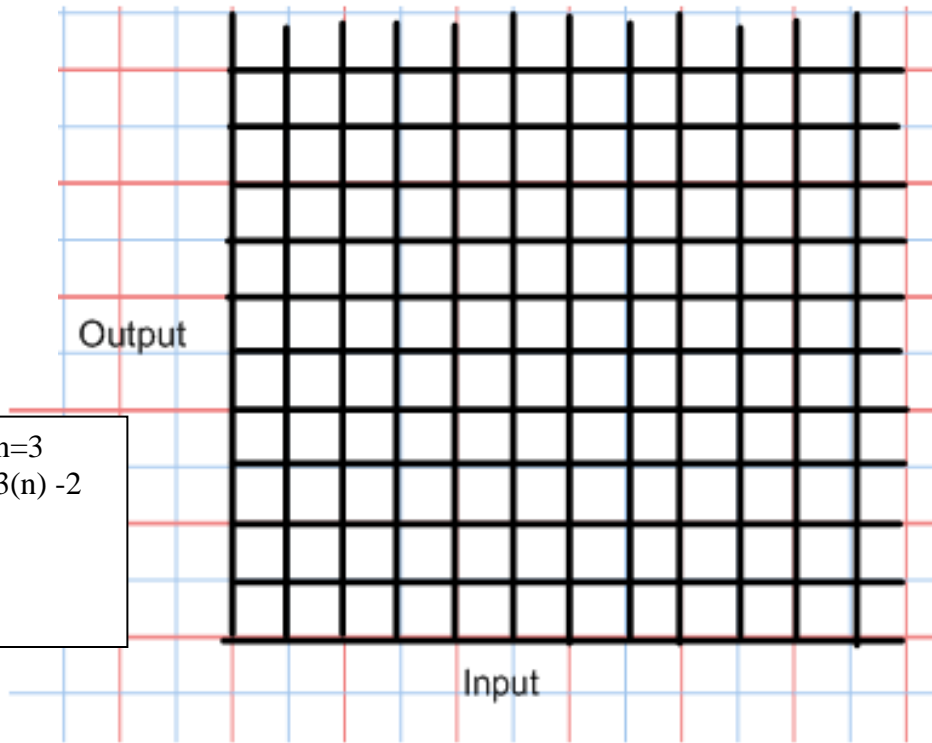
(b) Graph the relation,

(a)

Input	Output
n	$3n - 2$
1	
2	
3	
4	
5	

Show work

$n=1$	$n=2$	$n=3$
$3(n) - 2$	$3(n) - 2$	$3(n) - 2$



6. Evaluate each expression for $x = 6$. (SHOW ALL WORK)

(a) $3x$

(b) $3x + 5$

(c) $30 - 2x$

7. Use algebra tiles to model the following **equations**(not the solution): (DON'T SOLVE) Shaded +
 (a) $x + 7 = -4$ Unshaded -
 (b) $2x - 3 = 5$

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8. Model $x - 8 = 2$ with algebra tiles and THEN solve for x .
(Show all work and state the final answer $x = \underline{\hspace{2cm}}$)