

1. Fill in the blank with the correct response.

Algebraic expression	Written in WORDS	Numeric coefficient	Variable	Constant term
$2n$				
$n+4$				
$3r - 2$				
	Three more than double a number			
	Four more than the quotient of $g$ and 2			
	Seven less than eight times a number, $p$			
	Two more than the product of a number, $h$ , and 6			

2. Evaluate the following:

A) $3w + 6$ if $w = 7$	B) $18 - \frac{x}{3}$ if $x = 15$	C) $2k - 6$ when $k = 3$
D) $\frac{7}{0} =$ _____	E) $11z$ if $z = 8$	F) $\frac{0}{9} =$ _____

3. Write a sentence for each equation.

A) $2e - 6 = 8$	B) $y + 9 = 17$	C) $\frac{a}{4} = 44$
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4. Fill in the missing digit to make these numbers divisible by the number indicated.

A) 15\_\_\_\_ divisible by 2 and 4

B) 16\_\_\_\_ divisible by 3 and 5

C) 6\_\_\_\_80 divisible by 4 and 10

D) 2\_\_\_\_0 divisible by 6 AND 5

5. Give the rule for the following relation:

A) (i) symbolically (the algebraic expression): \_\_\_\_\_

(ii) mapping: \_\_\_\_\_

(iii) in words \_\_\_\_\_

Term number	1	2	3	4	5
Term	4	8	12	16	20

B) (i) symbolically (the algebraic expression): \_\_\_\_\_

(ii) mapping: \_\_\_\_\_

(iii) in words \_\_\_\_\_

Term number	1	2	3	4	5
Term	9	11	13	15	17

6. Complete the following tables.

A)

Input n	Output $2n + 4$

B)

Input n	Output $3n - 6$
	0
	3
	6
	9
	12

7. Fill In the blank.

A)  $2r + 5 = 11$  is an example of a(n) \_\_\_\_\_.

B)  $3r + 9$  is an example of a(n) \_\_\_\_\_.

8. Write the relation for the values given in the table below.

A) (i) symbolically (the algebraic expression): \_\_\_\_\_

(ii) mapping: \_\_\_\_\_

Input n	Output ?
1	5
2	10
3	15
4	20
5	25

B) (i) symbolically (the algebraic expression): \_\_\_\_\_

(ii) mapping: \_\_\_\_\_

Input n	Output ?
1	11
2	14
3	17
4	21
5	24

9. Using BEDMAS, solve for the missing term. SHOW YOUR WORKINGS.

A) $4x + 5 = 41$	B) $y - 12 = 21$	C) $\frac{t}{6} = 30$
D) $8r = 56$	E) $\frac{30}{2} = r - 2$	

10. Every week John earns \$8 plus \$3.00 per hour babysitting his sister.

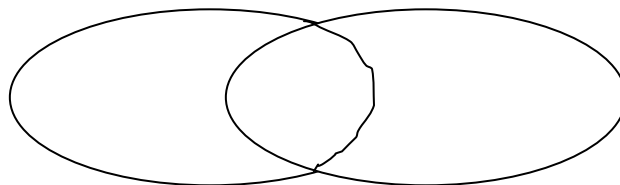
A) Write an algebraic expression for his earnings \_\_\_\_\_

B) Calculate his earning when he works the following hours:

Hours	Earnings
0	
1	
2	
2.5	
3	

11. Complete the Venn Diagram placing the following numbers based on the divisibility rules for 2 and 3 with the numbers: 16, 33, 14, 30, 18, 50

Divisible by 2                      by 6                      by 3



12. If  $\frac{4}{25} = 0.16$ ,  $\frac{4}{250} = 0.016$ ,  $\frac{4}{2500} = 0.0016$ , what is:

A)  $\frac{4}{2\,500\,000}$

B)  $\frac{4}{2\,500\,000\,000}$

