Student Name:
Period: Date:

## Assessment 1 Review

Write an algebraic expression for each verbal expression.

1) ten increased by four times a number 2 ) the sum of two and six times a number

Write a verbal expression for each algebraic expression.
3) $5 n^{2}-6$
4) $3 e+2 e^{2}$

Translate each sentence into an equation, inequality, or formula.
5) A number times two minus six is the same as another number divided by three.
6) The area $A$ of a rhombus is half the product of the lengths of the diagonals $a$ and $b$.
7) The quotient of a number and five increased by six is at most twelve.
8) Nine times a number is less than eight times that number decreased by two.

Translate each equation/inequality into a verbal sentence.
9) $2 x^{2}+3=21$
10) $\frac{n}{-6}=2 n+1$
11) $z-4>20$
12) $-2 \leq 9 w-4$

Evaluate each expression.
13) $5(9+3)-3 \cdot 4$
14) $16 \div 2 \cdot 5 \cdot 3 \div 6$
15) $25-\frac{1}{3}(18+9)$

Evaluate each expression if $a=2, b=5, x=4$, and $n=10$.
16) $b x+a n$
17) $(2 x)^{2}+a n-5 b$
18) $[a+8(b-2)]^{2} \div 4$

Identify the terms, variables, coefficients, and constants of the given expression. Reminder, use the box method, if necessary!
19) $-4 x^{3}+2 x^{2}-3 x-9$

Terms: $\qquad$
Variables: $\qquad$
Coefficients: $\qquad$
Constants: $\qquad$
20) $\frac{b}{5}+2 x y-13$

Terms: $\qquad$
Variables: $\qquad$

Coefficients: $\qquad$
Constants: $\qquad$

Write an algebraic expression to describe the situation below. Then, identify the terms, variables, coefficients, and constants.
21)The Conkle family went to see the new Stephen King movie, $I t$. There were two adults and all of their four children at the movies. They spent $\$ 85.00$ on snacks. If $x$ represents the price of an adult ticket and $y$ represents the price of a children's ticket, write an expressions that describes the amount of money they spent going to the movies. Then identify the terms, variables, coefficients, and constants.

Expression: $\qquad$
Terms: $\qquad$
Variables: $\qquad$
Coefficients: $\qquad$
Constants: $\qquad$

