MasterMath

Writing and Evaluating Algebraic Expressions and Equations

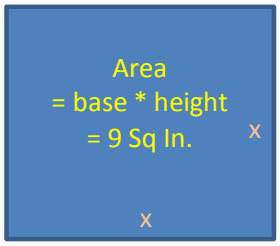
Name _____

Date _____

1. Evaluate the Expressions

Expression	Evaluate Expression for:	Answer	Expression	Evaluate Expression for:	Answer
2(z + 4)	z=5	18	3x	x=6	18
a + 6(3)	a=(-4)	14	2x + 4	x=2	12
12-4x	x=5	-8	5z - 8	z=4	12
4(x-13)	x=6	-28	y^2 - y + 2	y = 3	8

2. What is the value of x?



x = 3

3. Translate the verbal phrase into an algebraic expression

Verbal Phrase	Algebraic Expression
The amount of money needed to buy a $34 sweater if you now have x dollars	34 - x
Number of hours in m minutes	m/60
Number of years in w weeks	w/52
The amount you spend if you buy a sandwich for $5.50 and fries for f dollars	f + 5.5
The number of $15 hats you can purchase if you have x dollars	x/15
The amount of money you earn if you are paid $6 per hour and work for h hours	6h

4. Translate the verbal phrase into an algebraic equation

Verbal Phrase	Algebraic Expression
The sum of 36 and a number x is equal to 108	36 + x = 108
When you multiply a number n by 13, you get 65	13n = 65
The difference between 54 and the product of x and 3 is 24	54 - 3x = 24
The product of t and 5.33 is equal to 31.98	5.33x = 31.98
The sum of 12 and the product of 6 and x is 30	12 + 6x = 30
When you multiply your age (x) by 12, you discover you are 180 months old	12x = 180

5. You can run the mile in 6.5 minutes, which is 45 seconds faster than your friend Fred can run the mile. Write an equation that you could use to determine the time it takes for Fred to run a mile (f).

f = 6.5 + .75