4.2 Algebraic Expressions

NOTES

MATH 7

Write your questions here!

Algebraic Expression =

Variables =

Combine Like Terms

$6 + 3x + 5x$	$2y + 7 + 3y$	$4t + 3 + 5t + 2$
$8 + 2x - 6x$	$8d - 5 + d + 3$	$4x - 3y + 5x - 2y$

Translating Expressions

The sum of a number n and three.	Twice a number decreased by four.	The quotient of a number t and two increased by five.

Writing Expressions

A large bucket of popcorn costs \$4. You buy b buckets of popcorn plus \$6 in candy. How much did you spend?

You have \$20 and buy 3 notebooks that each cost x dollars. How much money do you have left?

SUMMARY:

Now, summarize your notes here!

PRACTICE

Simplify each expression.

1. $6y + 8 + 2y + 5$	2. $9 + 5a - 2 + 3a$	3. $6r + 2r + 4$
4. $3m + 5m - 10 + 7$	5. $5w + 4 - 3w - 2$	6. $5 - 4p + 6p$
7. $3a + 2b + 5a - 7b$	8. $3x - 5x + 4y + y$	9. $5d + 8 - 8d$
10. $3t + 2h - 5 + 7h$	11. $6d + 2 - 4d + 10 + 2d$	12. $5g - 9 - g$

Translate to an algebraic expression.

13. The quotient of a number d and four

14. The total of 5 and a number n

15. The difference of a number and ten

16. Twice a number increased by six

17. Eight decreased by a number h

18. The product of a number and two increased by that number

Write an algebraic expression for each situation.

19. You buy four candy bars at a cost of p dollars per candy bar. What is the total cost?

20. Donuts cost 2 dollars. You buy d amount of donuts. What is the total cost?

21. There are p people in a Google Meet. Seven people leave. How many people are in the Google Meet?

22. Bob has 5 pies. He bakes 2 pies every hour. How many pies does he have after h hours?

23. Deidra has 20 friendship bracelets. She gives b bracelets away to friends. How many bracelets does she have left?

24. Anthony has a dog walking business. He has 12 good reviews and gets 4 more every day. How many good reviews does he have after d days?

WRAP UP

1. Simplify the expression.

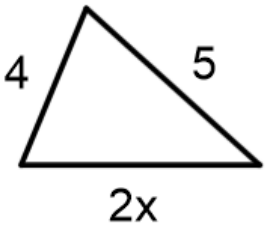
$$10b - 8 + 2b + 3$$

2. Translate to an algebraic expression.

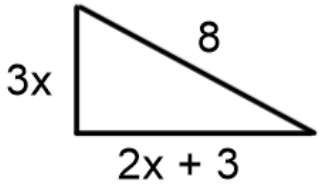
12 decreased by a number

3. Write an algebraic expression to represent the perimeter of the following.

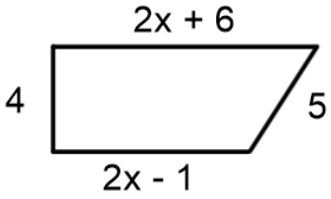
A)



B)



C)



EXIT TICKET –

Which of the following expressions correctly models the situation?

Ray has 8 dollars. He buys c candy bars that cost \$0.75 each. How much money does Ray have left?

(A) $8 + 0.75c$

(B) $8c + 0.75$

(C) $8 - 0.75c$

(D) $8c - 0.75$