## Translating Expressions/Equations

Day 2

Start by completing the SPRINT you picked up at the start of class.

5.Translating.notebook

October 07, 2019


...I asked you to evaluate the expressions you just wrote given that the number I referenced equals $2 \ldots$.

|  | Verbal Statement | Algebraic Expression | Evaluate for number $=2$ |
| :---: | :--- | :---: | :--- |
| 1. | Five increased by four times a number | $5+4 n$ |  |
| 2. | Eight less than twice a number | $2 n-8$ |  |
| 3. | Three times a number, increased by 9 | $3 n+9$ |  |
| 4. | The product of 4, and a number decreased by 7 | $4(n-7)$ |  |
| 5. | The number of feet in $x$ yards. | $3 x$ |  |
| 6. | Express the width of a rectangle which is seven less <br> than its length,$l$. | $n \bullet n \bullet n=n^{3}$ |  |
| 7. | A number repeated as a factor 3 times. |  |  |



- "Old Math Guy" is modeled after the traditional card game, "Old Maid." First, students should deal out all of the cards. Then, without showing others the cards in their hands, students look for matching pairs of verbal and algebraic expressions. They put down any pairs in front of them face up so others can confirm that they have indeed found a match.
- One player begins by holding their cards facing down in a fanned out fashion and offering their hand to the student to their left. If the receiving student gets a card that is a match with a card already in their hand they can put it down. Then the student who just took a card turns to the student on their left and allows them to select a card at random, etc.
- There is one card that is the "Old Math Guy." (Use either the color or black and white version.) The student who is stuck with this card after all other pairs are matched loses the game.


## Examples!

Translate. Evaluate each for $n=7$.

| 1. "The product of a number and $3 "$ | 2. "The difference of a number and 10 " |
| :--- | :--- |


| 3. The quotient of a number and $-5 "$ | 4. "Four subtracted from a number" |
| :--- | :--- |

5. "The sum of twice a number and 7"
6. "The product of a number and 10, increased by 1 "

Translate. Evaluate each for $n=(-2)$.

| 7. "Four less than a number squared" | 8. "Twice a number divided by 5 " |
| :--- | :--- |

IHST translate.

| 9. "The sum of twice a number and 10 is 36 " | 10. "Three times the difference of a number <br> and 7 is $188^{\prime \prime}$ |
| :--- | :--- |
| 11. "Four times a number divided by 8 is 3 " | 12. "Five times the sum of a number and 6 is <br> 48 " |
| 13. "One half of a number is 8 less than the <br> number itself" | 14. "The product of a number and 3 is the <br> same as the sum of that number and six" |
| 15. "Fifteen decreased by the quotient of a <br> number and 3 is $20^{\prime \prime}$ | 16. "Four less than the product of a number <br> and 7 is eight more than that number" |

Don't forget to study for tomorrow's quiz!!! Quiz Topics Include:

1. combining like terms
2. finding perimeter
3. translating expressions
4. anything we've covered is fair game
