



SE Learning Task: Deconstructing Word Problems

Part I: Warm-Up Expressions

For each expression below, translate the verbal expression to an algebraic expression

- 1) Ann has the 5 newest music CD's which is 3 less than twice the amount that Bob has.

- 2) Mike, who has 6 video games, has half as many games as Paul.

- 3) Nan rode the roller coaster 8 times, which was twice as many times as she rode the Ferris wheel. _____
- 4) Janine, who bought \$15 worth of make-up, spent \$6 less than Leah spent.

- 5) Rob, who has all 13 girls' phone numbers that are in his homeroom, has 3 more than half the number of girls' phone numbers that Jay has.

- 6) Kate's 85 on her English test was 37 points less than twice the grade on her Science test.

- 7) At the Middle School Graduation Dance, the DJ played 12 slow dances, which was equal to the quotient of the number of fast dances and 2.

Part II: Creating Equations from Word Problems

Use the chart provided in order to create expressions for the situation described in the word problem. Then, use these expressions and the word problem in order to create and solve an equation. Make sure you not only solve for the variable, but also answer the question being presented. Show all your work when solving the equations.

1. Sean sold 4 more boxes of candy for the school fundraiser than Marta. The sum of the boxes they sold was 22. How many boxes did each sell?

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2. Ned weighs $1\frac{1}{2}$ times as much as Jill and Tom weighs 15 kilograms more than Jill. If their combined weight is 190 kilograms, how much does each person weigh?

3. The sides of a triangular birdcage are consecutive integers. If the perimeter is 114 centimeters, what is the length of each side? Label each side with an expression that represents its length.



4. Caitlyn did $\frac{6}{7}$ of the problems on her math quiz correctly and four incorrectly. She did all the problems. How many were there?
5. Geri spent Friday, Saturday and Sunday selling a total of 24 magazine orders for her school fundraiser. The amounts she sold, respectively, on the three days were consecutive even integers. How many did she sell on each day?