

Example: Write each word phrase as a mathematical expression. Use n as the variable when needed. Then simplify if possible.

9.) (the fourth power of two) minus three squared

$$(2^4) - 3^2$$

$$16 - 3^2$$

$$16 - 9 = 7$$

10.) (the sum of a number and four) raised to an exponent of 3, minus five

$$(n + 4)^3 - 5$$

Example: Write each expression as a word phrase.

11.) $3^3 - x$ * three cubed minus a number

* the third power of three decreased by a number

* the difference of three cubed & a number

12.) $(4y - 2) + 9$

* $4y$ minus 2, increased by 9

* $4y$ take away 2, added to 9

* the difference of $4y$ & 2, plus 9

13.) * Ann sells 15 tickets to the school play. Gail sells 5 fewer tickets than Ann. Michele sells twice as many tickets as Gail, squared. How many tickets do Ann, Michelle, and Gail sell in all?

$$\text{Ann} \Rightarrow 15$$

$$\text{Gail} \Rightarrow 15 - 5 = 10$$

$$\text{Michelle} \Rightarrow 2 \cdot 10 = (20)^2 = 400$$

$$\text{Total: } 15 + 10 + 400 = \boxed{425 \text{ tickets}}$$