

Unit 1 Discussion Example – Post 3: Reply to a Classmate

Hi Classmate. The posted expression was:

$$1 + (2 \times 3) - \frac{4}{5^2} \text{ and it was solved correctly to equal } 6.84$$

a) Let's take away the parentheses and see if we get the same result but STILL using the order of operations. We don't have to worry about any parentheses.

$$1 + 2 \times 3 - \frac{4}{5^2}$$

$$1 + 2 \times 3 - \frac{4}{25} \quad \text{Evaluating the Exponent}$$

$$1 + 6 - \frac{4}{25} \quad \text{Multiplying or Dividing whatever came first from left to right}$$

$$1 + 6 - 0.16 \quad \text{Multiplying or Dividing whatever came first from left to right}$$

$$7 - 0.16 \quad \text{Adding or Subtracting whatever came first from left to right}$$

$$6.84 \quad \text{Adding or Subtracting whatever came first from left to right}$$

b) In this case, the result is the same!! The parentheses weren't necessary, but this is not always the case! For example, if the parentheses were around the addition, say $(1+2)$, then this part would be evaluated before you multiplied it to the 3.

$$(1+2) \times 3 \dots$$

That WOULD change the result.