

Algebra 1 - 9th grade

Warm-up 1.3

Evaluate for the given values of the variable.

1. $3x - 4$ for $x = 5$

$$\begin{aligned}3(5) - 4 \\= 15 - 4 \\= 11\end{aligned}$$

2. $4n + 3$ for $n = 2$

$$\begin{aligned}4(2) + 3 \\= 8 + 3 \\= 11\end{aligned}$$

3. $2y - 5$ for $y = 12$

$$\begin{aligned}2(12) - 5 \\= 24 - 5 \\= 19\end{aligned}$$

~~LESSON~~ - Order of Operations

8/31

Parentheses

Exponents

(Multiply) together but L → R
Divide

(Add
Subtract) together but L → R

Simplify each expression.

$$\begin{aligned} & 3 - \underline{12 \div 4} \\ & = 3 - 3 \\ & = 0 \end{aligned}$$

$$\begin{aligned}& \underline{\underline{6^2}} \div 4 \cdot 5 \\&= \underline{\underline{36 \div 4}} \cdot 5 \\&= 9 \cdot 5 \\&= 45\end{aligned}$$

$$\begin{aligned} & \underline{\underline{6^2}} - 4 \cdot 3 + \underline{\underline{7^2}} \\ &= 36 - \underline{\underline{4 \cdot 3}} + 49 \\ &= \underline{\underline{36}} - \underline{\underline{12}} + 49 \\ &= 24 + 49 \\ &= 73 \end{aligned}$$

$$\begin{aligned} & (\underline{8 \cdot 7} + 2) + (\underline{3 \cdot 2} - \underline{2 \cdot 2}) \\ &= (56+2) + (6-4) \\ &= 58 + 2 \\ &= 60 \end{aligned}$$

Insert grouping symbols to make the equation true.

$$(30 + 4) \div 2 - 1 = 16$$
$$34 \div 2 - 1$$
$$17 - 1$$

$$(18 + 30) \div 2 = 24$$
$$48 \div 2$$

Use order of operations to evaluate:

multiply

$$5x^2 + 7y \text{ for } x = 3, y = 2$$

$$\begin{aligned} & 5 \cdot \underline{\underline{3^2}} + 7 \cdot 2 \\ & = 5 \cdot \underline{\underline{9}} + 7 \cdot \underline{\underline{2}} \end{aligned}$$

$$= 45 + 14$$

$$= 59$$

HW: pg 21
#18-54 even
due Friday
or
Tuesday