

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 1D.1 - The Order of Operations

1. What is the correct order of operations? How many steps are there?

① ② ③ ④
PEMDAS

There are 4 steps.

Principles of Algebra

- ① Grouping Symbols ② Exponents ③ Multiply and Divide from left to right ④ Add and subtract from left to right

#2-7, Simplify.

2. $50 - 20 + 30$

Add/subtract from left to right!

$= 30 + 30$

$= \boxed{60}$

3. $18 \div 6 \cdot 3$

Multiply/divide from left to right!

$= 3 \cdot 3$

$= \boxed{9}$

4. $4(3 - 12) \div 9$

$= 4(-9) \div 9$

$= -36 \div 9$

$= \boxed{-4}$

5. $5^2 - 4|8 - 10|$

Simplify inside absolute value down to a single number, then take the absolute value of that number

$= 5^2 - 4|-2|$

$= 5^2 - 4(2)$

$= 25 - 4(2)$

$= 25 - 8$

$= \boxed{17}$

6. $(6 - 4)^3 \cdot (-2) \div |6^2 - 20|$

$= (2)^3 \cdot (-2) \div |36 - 20|$

$= 2^3 \cdot (-2) \div |16|$

$= 2^3 \cdot (-2) \div 16$

$= 8 \cdot (-2) \div 16$

$= -16 \div 16$

$= \boxed{-1}$

7. $[(-2)(-3) + 1]^2 - (10 - 15) - |10 - 15|$

$= [6 + 1]^2 - (-5) - |-5|$

$= 7^2 - (-5) - 5$

$= 49 - (-5) - 5$

$= 49 + 5 - 5$

$= \boxed{49}$