

September 6, 2016
 * Quiz #3 - Tomorrow
 1. Power Tools
 2. CORE 1.1
 3. CORE 1.1
 4. Quiz #2

Sep 6-9:02 AM

Sep 6-9:05 AM

C. CORE 1.2
Order of Operations
 $-4 + 2 \cdot 8$
 ① $-2 \cdot 8 = -16$
 * ② $-4 + 16 = 12$

Sep 6-9:06 AM

① Simplify inside (or clear)
 Grouping symbols first.
 $(), [], \{ \}, \frac{a}{b}, |a|, \sqrt[n]{a}$
 $\frac{6}{3} = 2$ $|3-5| = 2$ $\sqrt{36} = 6$
 $| -5 | = 5$

Sep 6-9:10 AM

② Evaluate Exponents
 $5^3 = 5 \cdot 5 \cdot 5$
 $= 25 \cdot 5$
 $= 125$
 $x^7 \rightarrow$ nothing to evaluate here!

Sep 6-9:16 AM

③ Multiplication or Division
 whichever comes first
 working from left to right.
 $2 + 8 \div 4 \cdot 6$
 $2 + 2 \cdot 6$
 $2 + 12$
 14

Sep 6-9:17 AM

④ Addition or Subtraction
 whichever ever comes first
 from L to R.

Sep 6-9:21 AM

$$\begin{aligned}
 & -3 - 4[-3 - 4(-3 - 4)] \\
 & -3 - 4[-3 - 4(-7)] \\
 & -3 - 4[-3 + 28] \\
 & -3 - 4[25] \\
 & -3 - 100 \\
 & \quad \underline{-103}
 \end{aligned}$$

Sep 6-9:23 AM

$$\begin{aligned}
 & x = -3 \quad y = -2 \\
 & -7x^2 + 3x^3 - 5y^2 + y^3 \\
 & -7(-3)^2 + 3(-3)^3 - 5(-2)^2 + (-2)^3 \\
 & -7(9) + 3(-27) - 5(4) + (-8) \\
 & -63 + (-81) + (-20) + (-8) \\
 & -144 + (-20) + (-8) \\
 & -164 + (-8) \\
 & \quad \underline{-172}
 \end{aligned}$$

Sep 6-9:35 AM

$$\begin{aligned}
 \#28) & (8-10)^2 - (4-5)^3 \\
 & (-2)^2 - (-1)^3 \\
 & [(-2) \cdot (-2)] - [(-1) \cdot (-1)] \cdot (-1) \\
 & 4 - [(1) \cdot (-1)] \\
 & 4 - (-1) \\
 & 4 + 1 \\
 & \quad \underline{5}
 \end{aligned}$$

Sep 6-9:28 AM