

## Evaluating Expressions

1/2

Steps:

1. plug in given values for variables
2. follow PEMDAS - use "triangle" Math to SHOW ALL WORK

P = parenthesis

E = exponents

M = Multiply

D = Divide

A = Add

S = Subtract

Jan 2-9:41 AM

Evaluate the expressions for

$$c = 8, \quad d = -5 \quad \& \quad g = -1$$

$$\begin{array}{l}
 1. \quad 3(c+d) \\
 \quad 3(8+(-5)) \\
 \quad \quad 3(3) \\
 \quad \quad \quad 9
 \end{array}$$

$$\begin{array}{l}
 2. \quad 2c - 4d \\
 \quad 2 \cdot 8 - 4(-5) \\
 \quad 16 - 4(-5) \\
 \quad \quad \quad \downarrow \\
 \quad \quad \quad ++20 \quad 16++20 \Rightarrow 16+20 \\
 \quad \quad \quad \boxed{36}
 \end{array}$$

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$$c=8, d=-5 \quad \& \quad g=-1$$

$$3. \quad 2d^2 + 5g$$

$$2(-5)^2 + 5(-1)$$

$$\underline{2(25)} + \underline{5(-1)}$$

$$50 + -5$$

$$\boxed{45}$$

$$4. \quad d(c+g) + 3^2$$

$$-5(8+(-1)) + 3^2$$

$$\underline{-5(7)} + 9$$

$$-35 + 9$$

$$\boxed{-26}$$

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$$c=8, d=-5 \quad \& \quad g=-1$$

$$5. \quad \frac{(c-d)}{2} = \frac{8+5}{2} = \frac{13}{2} = 6.5$$

$$4 + 2.5 = 6.5$$

$$6. \quad \frac{gc+d^2}{4} = \frac{-1(8) + (-5)^2}{4} = \frac{-8+25}{4} = \frac{17}{4} = 4.25$$

$$-2 + 6.25 = 4.25$$

$$7. \quad \frac{c}{2}(gd)^2 = \frac{8}{2}(-1(-5))^2$$

$$4(5)^2$$

$$4(25)$$

$$100$$

Jan 2-10:01 AM