

Name Kay Your score _____ Percent _____ %

Chapter 2 ADV. Part I study guide Melott Possible points _____ Grade _____

Show work on all problems.

• you can use a calculator

Evaluate each expression if $a = 2.5$, $b = 1$, $c = 1.1$
Round to nearest hundredth if necessary.

1. $6(ab)^1$ $6 \cdot (2.5 \cdot 1)$ $6 \cdot 2.5$ <u>15</u>	2. $(ac)^0$ 1 b/c anything to the zero = 1	3. $b(4a)^b$ $1 \cdot (4 \cdot 2.5)^1$ $1 \cdot 4 \cdot 2.5$ <u>10</u>	4. $b^b c^c$ $1^1 \cdot 1.1^{1.1}$ <u>1.11</u>
5. $(c^0 b^b)$ $(1.1^0 \cdot 1^1)$ $1 \cdot 1^1 = 1$	6. $\frac{(b^5 c^3)^7}{(a^5 b^2 c^1)^1}$ $\frac{b^{35} \cdot c^{21}}{a^5 b^2 c^1} =$ $= \frac{b^{33} c^{20}}{a^5}$ $\frac{1^{33} \cdot 1.1^{20}}{2.5^5} = \frac{6.73}{97.66}$ Simplify them solve <u>0.07</u>		
7. $a^b c^{a+a+a}$ $2.5^1 \cdot 1.1^{2.5+2.5+2.5}$ $2.5 \cdot 1.1^{7.5} =$ <u>5.11</u>			

Simplify

8. $(3x - 11) - (-x + 4)$ $3x - 11 + x - 4$ <u>$4x - 15$</u>	9. $(5x^2 - 7x^2 y^2 - 8x + 4x^2) + (-3x^2 y^4 + 2x^2 - 7x)$ <u>$7x^2 y^2 + 6x^2 - 10x - 3x^2 y^4$</u>
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Solve the following problem

10. Mrs. Melott spent $93x^2 + 24xy - 12y$ dollars on a recent shopping trip. Mrs. Walters spent $77x^2 - 33xy - 45y$ dollars. How much more money did Mrs. Melott spend? $93x^2 + 24xy - 12y - (77x^2 - 33xy - 45y)$ $93x^2 + 24xy - 12y - 77x^2 + 33xy + 45y$ <u>$\\$ (16x^2 + 57xy + 33y)$ left</u>
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Match the property with the appropriate letter. Each one is only used one time.

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|--------------|-------------------------------------|---|
| 11. <u>F</u> | $(4 \cdot 5)1.4 = 4(5 \cdot 1.4)$ | a. multiplicative property of zero |
| 12. <u>D</u> | $2(1) = 2$ | b. distributive property |
| 13. <u>B</u> | $x(4 + 8) = x(4) + x(8)$ | c. commutative property |
| 14. <u>E</u> | $0 + 3 = 3$ | d. identity property |
| 15. <u>C</u> | $1.2 + 7.1 + 3.3 = 3.3 + 7.1 + 1.2$ | e. zero property of addition |
| 16. <u>A</u> | $111(0) = 0$ | f. associate property |

K H D d C mm

Convert the following measurements.

<p>17.</p> <p>999 mm = <u>.999</u> m</p> <p>999 3 left</p>	<p>18.</p> <p>17 g = <u>.017</u> kg</p> <p>.017 3 left</p>	<p>19.</p> <p>11.7 kL = <u>1170000</u> cL</p> <p>1170000 5 left</p>
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Please show LOOPS (movement) then right answer

Solve the word problem below.

20.

A liter of healthy human blood contains approximately 4×10^9 white blood cells. A healthy adult contains about 5.5 liters of blood. How many more times red blood cells does a healthy adult have than white blood cells. Refer to previous answer for the number of red blood cells. Express your final answer rounded to the

2.5×10^{13} L

Ⓘ $4 \times 10^9 \times 5.5$

2.2×10^9

$2.2 \times 10^1 \times 10^9$

2.2×10^{10} ~~total white blood cells~~

Ⓡ $\frac{2.5 \times 10^{13}}{2.2 \times 10^{10}}$

1.14×10^3 times more