Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_

**8.0B NOTES – Literal Equations**

*Objective: rewrite equations to solve for one variable in terms of the other variables(s). CC.8.EE.7*

**EXAMPLES:** How can you use a formula for one measure to write a formula for a different measure?

|  |  |
| --- | --- |
| 1. Use the formula of the circumference C of a circle to solve the formula r.

$$C=π∙2r$$1. Use the new formula to find the radius of the circle. Use 3.14 for $π$. Round to the nearest tenth.
 | **TA: C:\replacearts\Blue Record and Practice Journal\Blue Chapter 1 RPJ\Arts\PNGs\mscc8_rpj_0104_02.png** |
| 1. Use the formula of the Area A of a trapezoid to solve for the formula for h.

$$A=\frac{\left(b+B\right)h}{2}$$1. Use the new formula to find the height.
 | TA: C:\replacearts\Blue Record and Practice Journal\Blue Chapter 1 RPJ\Arts\PNGs\mscc8_rpj_0104_03.png |
| 1. Use the formula for the perimeter P of a rectangle to solve for the formula for w.

$$P=L+L+W+W$$1. Use the new formula to find the width of the rectangle.
 | **TA: C:\replacearts\Blue Record and Practice Journal\Blue Chapter 1 RPJ\Arts\PNGs\mscc8_rpj_0104_00.png**  |

**EXAMPLES:** Solve for the equation for y

|  |  |
| --- | --- |
| 1. $6=4x+3y$
 | 1. $\frac{1}{3}y+x=4$
 |

**BACK 🡪**

**PRACTICE PROBLEMS**

|  |  |
| --- | --- |
| 1. Solve the equation for y.

$$2y-1.5x=8$$ | 1. Solve the equation for y.

$$3x+\frac{1}{5}y=7$$ |

**SIMILAR QUIZ QUESTION #9 (Quiz 8.1-8.2):**

A cylindrical rain barrel with a diameter of 3.5 feet and a height of 4.7 feet is filled to a height of a 1.25 feet. How many more gallons of water can the barrel hold? Round your answer to the nearest whole number. IMPORTAN: change cubic feet into gallon 🡪 $1 ft^{3}≈7.5 gal$

ANSWER: \_\_\_\_\_\_\_ gallons

**SIMILAR QUIZ QUESTION #10 (Quiz 8.1-8.2):**

One cubic foot of sand weighs about 90 pounds. Approximate the weight of the cone-shaped pile of sand. Round your answer to the nearest hundredth.



**2.6 ft**

**4.5 ft**

ANSWER: \_\_\_\_\_\_\_ pounds

**SIMILAR TEST QUESTION #15 (CH 8 Test):**

A bale of hay in the shape of a rectangular prism has length of 7 feet, a width of 3 feet, and a height of 3 feet. A cylindrical bale of hay has a diameter of 8 feet and a height of 5 feet. How many rectangular bales contain the same amount of hay as one cylindrical bale? Round your answer to the nearest tenth.

ANSWER: \_\_\_\_\_\_\_ bales