## Literal Equations Project



You are going to create a literal equations poster of your name. You will also complete a formula sheet (on notebook paper) with original formulas and the rewritten formulas (please show ALL work). On your formula sheet please explain the significance of each formula used.

### Guidelines:

You must have at least 15 letters on your poster. You can use a combination of your first, middle and last name.

If your first name is "Beth" you could use V = Bh to solve for the "B" in Beth, and then solve for "h" in your name with the same formula.

If your name is "Ana" you need to choose two different formulas for the letter "a". You cannot use the same rewritten formula twice.

You will have 42 different equations to choose from to create your poster.

On your poster you also must draw, cutout or print out some representation (picture) of who you are. Your poster must be neat and show creativity.

### Rubric

Formula Sheet = 50 points

Equations Solved Correctly on your poster = 30 points

Picture that represents you = 10 points

Neatness/Creativity = 10 points

10 points will be deducted from your grade for every day late.

## Example of poster

$$M=(y-b)/x$$

R=

S=

B=

U=

C=

K=

# Example of formula sheet

1. I used the slope formula y = mx + b.

$$y = mx + b$$

$$-b - b$$

$$y - b = mx$$

$$x x$$

$$y - b = m$$

$$x$$

or 
$$m = y - b$$

<sup>\*\*</sup>Remember, you must show ALL work and include the significance of each formula to receive full credit. Show each step in solving your literal equations. \*\*





### Literal Equations Project

2. 
$$A = \frac{1}{2}$$
 bh Area of a triangle

3. 
$$A = \pi r^2$$
 Area of a circle

4. 
$$A = \frac{1}{2} h(b_1 + b_2)$$
 Area of a trapezoid

5. 
$$C = \pi d$$
 Circumference of a circle

6. 
$$C = 2\pi r$$
 Circumference of a circle

8. 
$$V = \pi r^2 h$$
 Volume of a Right Circular Cylinder

9. 
$$V = \frac{1}{3}Bh$$
 Volume of a Right Square Pyramid

10. V = 
$$\frac{1}{3}\pi r^2 h$$
 Volume of a Right Circular Cone

13. 
$$y = mx + b$$
 Slope Intercept Form

14. 
$$a^2 + b^2 = c^2$$
 Pythagorean Theorem

18. 
$$a + b + c = 180$$
 Measure of angles in a triangle

19. 
$$P = I^2R$$
 Power in an electric circuit

20. 
$$ax + b = 0$$
 Linear equation in one variable

21. 
$$s = \frac{1}{2} gt^2$$
 Distance

22. K = 
$$\frac{1}{2}$$
 m $v^2$  Energy

23. 
$$P = 2l + 2w$$
 Perimeter of a rectangle

24. 
$$ax + by = c$$
 Linear equation in two variables

25. 
$$V = \frac{KT}{P}$$
 Volume of a gas

26. 
$$x = \frac{a+b}{2}$$
 Average of two numbers

27. D = 
$$\frac{C-s}{n}$$
 Depreciation

28. 
$$F = \frac{9}{5}C + 32$$
 Celsius/Fahrenheit

29. 
$$A = P + Prt$$
 Amount at simple interest

30. 
$$SA = 2\pi r^2 + 2\pi rh$$
 Total surface area of a cylinder

33. 
$$180(n-2) = s$$
 Sum of angles formula

35. 
$$z = \frac{x - \bar{x}}{s}$$
 Population samples

36. 
$$v^2 = u^2 + 2as$$
 Velocity and Acceleration

39. 
$$SA = 2\pi rh + 2B$$
 Surface Area of a Right Circular Cylinder

40. 
$$SA = B = \frac{1}{2} Pl$$
 Surface Area of a Right Square Pyramid

42. 
$$E = mc^2$$
 Energy







