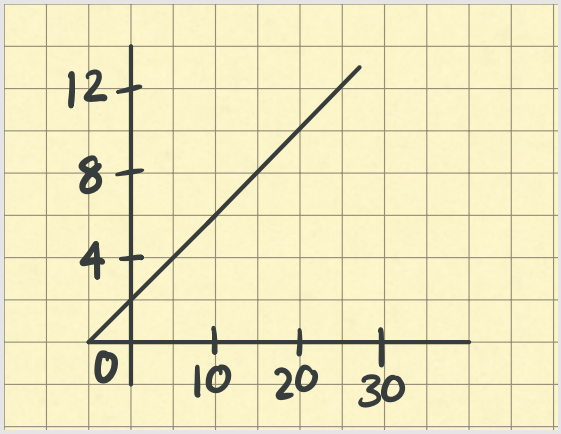
Topics to review:

- Slope-intercept equation from two points
- Y-Intercepts Overview
- Worked example: slope from two points
- How to determine if a point lies on a line or not using the point and the equation

Problem 1

What is the equation of the line?



Questions to think about:

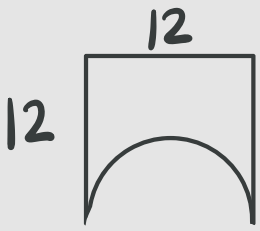
- (1) Which points can we SEE on the graph of the line? Hint: We can see that the point is located on the graph of the line. Find more points.
- (2) What is the equation of ANY straight line in slope-intercept form? If you are unsure, you should watch the videos above :)
- (3) Choose two points from (1) and find the slope of the line.
- (4) What is the y-intercept of the line?
- (5) What is the equation of the line in our original problem
- (6)Take a point from (1) and plug the x and y values into the equation from (5) to check if the equation is true. Hint: The point (4,6) represents x=4 and y=6.

Topics to review:

- Finding the area of a circle
- Squaring a number
- Rewriting expressions

Problem 2

Which of the following is equal to the area of the shape?



(A) $12^2 - \pi(6)$

(B) $12^2 - \pi(12)^2$

(C) $2 \cdot 12 - \pi(12)^2$

(D) $12^2 - \pi(6)^2$

Questions to think about:

- (1) Which two shapes do we need to know the formula for their area? What are the formulas?
- (2) What are the formulas? Fill in the formula as much as possible.
- (3) Which math operation do we need to apply to both of the areas? (Add, subtract, divide, etc.)
- (4) After selecting your answer, rewrite the expression in another way.

Topics to review:

- How to write algebraic expressions from word problems

Problem 3
Click the link below to complete the example problems:
Algebra word problems