

ALGEBRA I – TEAM QUESTION # 1

Mrs. Jones bought 36 yards of curtain material. She used three-fourths as much in the dining room as in the living room, and one-half as much in the kitchen as in the living room. How many yards did she use in the dining room

ALGEBRA I – TEAM QUESTION # 2

The area of a right triangle, whose base is 6 feet, is 24 square feet. What is the measure of the hypotenuse.

ALGEBRA I – TEAM QUESTION # 3

If 7 pounds of variety p tea is worth 5 pounds of variety q tea, and 3 pounds of variety p tea is worth x pounds of variety q tea, then the numerical value of x is.....

ALGEBRA I – TEAM QUESTION # 4

Identify the slope as a power of 10 for the graph, $10^{18}x + 10^6y = 10^{34}$

ALGEBRA I – TEAM QUESTION # 5

Tom is giving away baseball cards. First he gave half the cards plus one extra to Leila. Then, he gave half of what was left plus one extra card to Karl. Then, he gave half of what was left plus one extra card to Jarrod. Finally, he gave the remaining 74 cards to Charlene. How many baseball cards did Tom have to start?

ALGEBRA I – TEAM QUESTION # 6

As I stood in the cafeteria line, I observed that there were nine more people behind me than there were ahead of me. There were three times as many people in line as there were people ahead of me. How many people were in line?

ALGEBRA I – TEAM QUESTION # 7

What is the area of a framed picture, if a 10" by y" print is surrounded by a frame 2" wide, and the area of the frame is a 100 square inches?

ALGEBRA I – TEAM QUESTION # 8

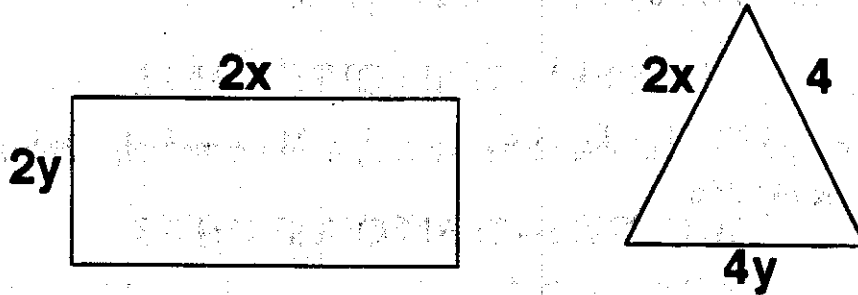
The sum of two integers, $x + y$, is 2, and the product of these integers, xy , is -15. If $x > y$, what is the difference, $x - y$ of these integers?

ALGEBRA I – TEAM QUESTION # 9

If $f(x) = 5x - 17$ and $g(x) = -2x + 3$, what is $f(2) - g(3)$?

ALGEBRA I – TEAM QUESTION # 10

The perimeter of the triangle is 22, and the perimeter of the rectangle is 34.
Find the ratio of y to x in simplest form.



ALGEBRA I – TEAM QUESTION # 11

If $xy = 1$, and $x = 4^{-3}$, what will be the value of $\frac{y^3}{x^{-2}}$

ALGEBRA I – TEAM QUESTION # 12

Simplify: $(x^2 + y^2)\sqrt[3]{5} - (x^2 - y^2)\sqrt[3]{5}$

ALGEBRA I – TEAM QUESTION # 13

Half of the applicants for a position were turned down based on lack of qualifications. Three others were eliminated after personal interviews, leaving two-fifths of the total number of applicants for the position. How many applicants were there for the position?

ALGEBRA I – TEAM QUESTION # 14

The amount of homework math students do is inversely proportional to the temperature outside. If math students do 45 minutes of homework when the temperature is 50° , how many minutes of homework do they do when the temperature reaches 90° .

ALGEBRA I – TEAM QUESTION # 15

Use the diagram to solve for x .