Good day, Rigger:

Thank you for checking out this little freebie.

Please pardon my crude drawings and chicken scratch, but the lesson nevertheless has merit. I hope you enjoy it. (The for-sale stuff is much better quality).

If you aren't familiar with geometry, algebra, binomials, and the like, please do not fret. I show you the algebra needed to solve a simple puzzle merely to show you how complex "the other guys' " methods are.

I intend to only show you that the accepted math used throughout the world means that you have to go a long way to get a simple answer - whereas my methods are far, far simpler, and can give you an answer much more quickly, and often you can cipher it in your head without the use of a computer or calculator.

So take a glance at the next few pages and ponder.

If you find that this freebie piques your interest, then you might really enjoy Bridle Dynamics, or the Primer.

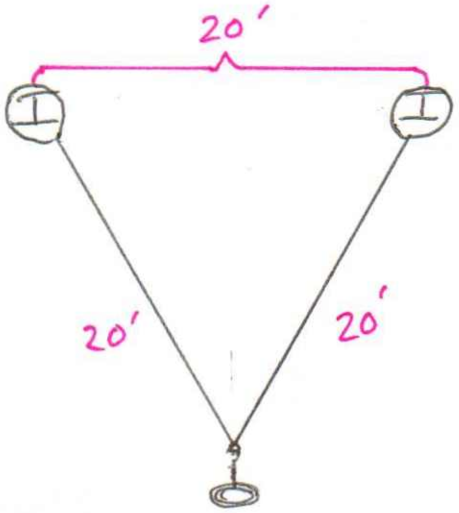
If you're already familiar with basic geometry and algebra, then skip the Primer. But if you feel you need a little background on the basic math involved, then you should buy the Primer and get familiar with the basics.

Afterward, Bridle Dynamics will make much more sense to you.

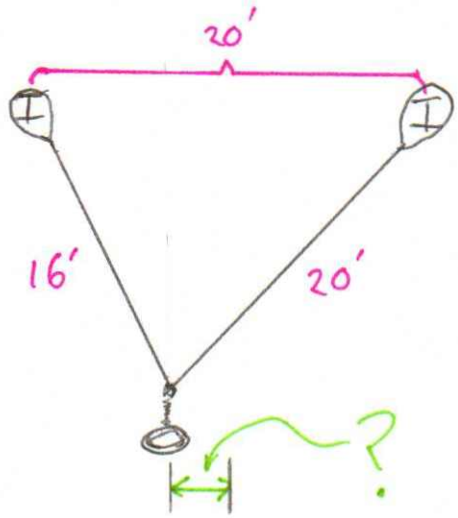
Where else are you going to learn new math theories, superior to all the commonly accepted ones, for a mere pittance? (They don't teach this stuff in high schools or colleges because they are unaware of them).

All the best, and Happy Rigging!

HOW EVERYBODY ELSE DOES IT:



BEFORE



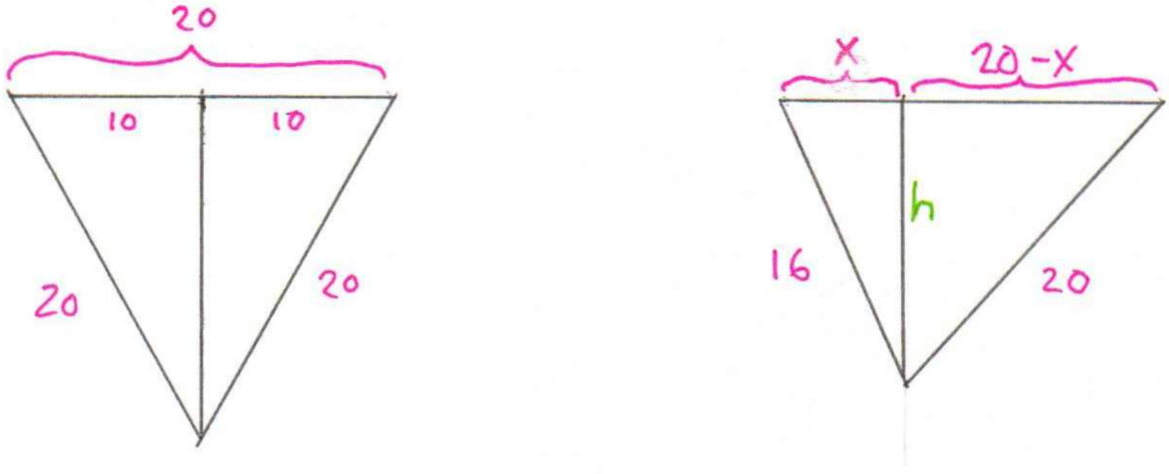
AFTER

PROBLEM: A Rigger is told to change an even bridle by removing 4' of material out of the leg on the left side.

How far EXACTLY will the load move to the left?

Using algebra we can solve the problem for the distance moved

Let's redraw the bridle using right triangles and label things.



BEFORE

AFTER

Using just the drawing on the right, we can get two equations, set them equal to each other, then solve.

① $x^2 + h^2 = 16^2$ and $(20-x)^2 + h^2 = 20^2$

② $\underline{x^2+h^2} = 256$ and $400 - 40x + \underline{x^2 + h^2} = 400$

③ We already know the value of x^2+h^2, so plug it into the equation on the right to yield:

$$400 - 40x + 256 = 400$$

$$656 - 40x = 400$$

$$-40x = 400 - 656$$

$$-40x = -256$$

$$\frac{-40x}{-40} = \frac{-256}{-40}$$

$$\boxed{x = 6.4}$$

(4) Now we know that the distance to the point from the beam on the left is 6.4 feet. But the point started at 10 feet from the beam, so the point has moved 3.6 feet to the left (Because 10 − 6.4 = 3.6)

THIS IS HOW THE REST OF THE WORLD WOULD SOLVE THIS PROBLEM, USING ALGEBRA AND LOGIC WHICH HAVE BEEN AROUND FOR THOUSANDS OF YEARS.

BUT HOW WOULD I SOLVE THE PROBLEM USING BRIDLE DYNAMICS?

ANSWER: The bridle leg on the left started at 100% of span and after adjustment was reduced to 80% of span.
That's an average of 90%. $\left(\frac{100+80}{2}\right)$
The length of adjustment was 4'.
So 90% × 4' = 3.6 feet

DONE

★ When making adjustments to both sides of a bridle (using the Give-and-Take method) getting the answer is EVEN EASIER!!