

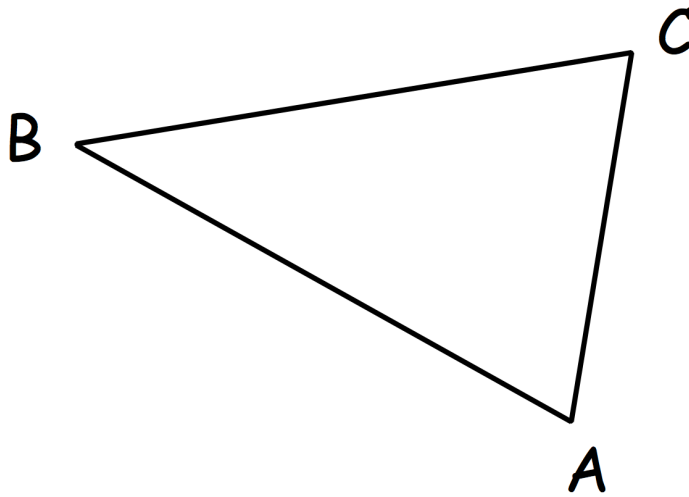


The force, F , between two magnets is inversely proportional to the square of the distance, d , between them.

When $F = 4$, $d = 3$.

Express F in terms of d .

ABC is a garden. A tree is planted closer to wall AB than wall BC.
The tree is closer to point A than point B.
Show the region of possible locations that the tree can be planted



Two spheres have volumes in the ratio 8:125

The radius of the larger sphere is 30cm.

What is the radius of the smaller sphere?

Simplify

$$\frac{x+9}{4x} + \frac{7}{3x}$$