

Unit 6.6 Hints to solve

14. The lengths of two sides of a regular quadrilateral are represented by the expressions $8x - 6$ and $4x + 22$. Find the length of a side of the quadrilateral.

Since this is a “regular” quadrilateral then the sides are all equal, so set up this way:

$$8x - 6 = 4x + 22$$

Solve for x

Then put x back into $4x + 22$ to get the side length

15. The expressions $(3x + 63)^\circ$ and $(7x - 45)^\circ$ represent the measures of two angles of a regular decagon. Find the measure of an angle of the decagon.

Since this is a “regular” decagon then the angles are all equal, so set up this way:

$$3x + 63 = 7x - 45$$

Solve for x

Then put x back into $3x + 63$ to get the angle