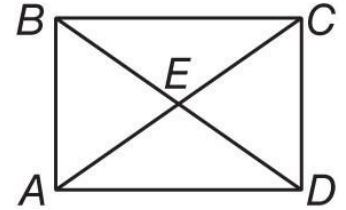


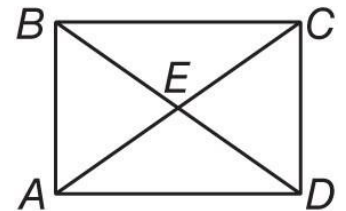
## Assignment 6.4

1. Quadrilateral ABCD is a rectangle.

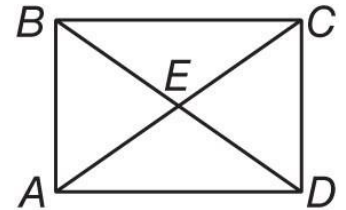
(a) If  $AE=36$  and  $CE=2x-4$ , find  $x$ .



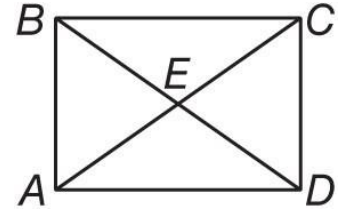
(b) If  $BC=24$  and  $AD=5y-1$ , find  $y$ .



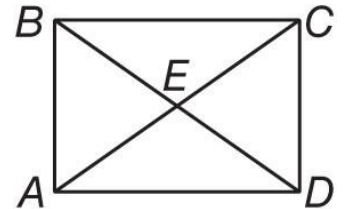
(c) If  $AC=2x+13$  and  $DB=4x-1$ , find  $DB$ .



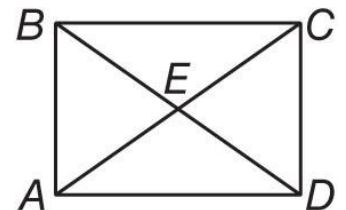
(d) If  $m\angle BDC=7x+1$  and  $m\angle ADB=9x-7$ . Find  $x$ .



(e) If  $m\angle ABD=7x-31$  and  $m\angle CDB=4x+5$ , find  $m\angle ABD$ .



(f) If  $ED=10$  and  $AC=5x-20$ , find  $x$ .



2. You are given a quadrilateral with any four points. Explain below how you would show whether a quadrilateral is a rectangle or not.

Using complete sentences is a must, otherwise you will receive no credit. If your English teacher wouldn't accept it, neither will I.

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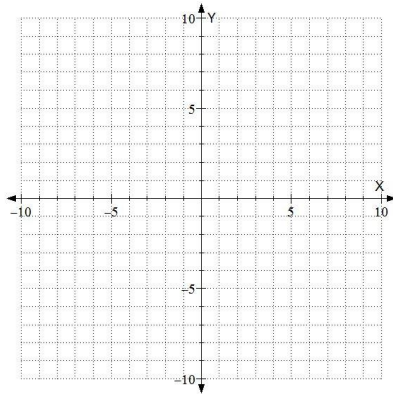
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3. Graph the quadrilateral with the given vertices below and show whether it is a rectangle.  $P(-3,-2)$ ,  $Q(-4,2)$ ,  $R(2,4)$ ,  $S(3,0)$



4. Graph the quadrilateral with the given vertices below and show whether it is a rectangle.  $J(-6,3)$ ,  $K(0,6)$ ,  $L(2,2)$ ,  $M(-4,-1)$

