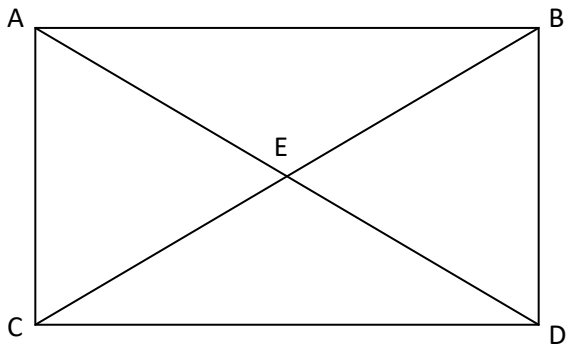
Topic 19 Problem Set

1) Given rectangle ABCD with the following information:

Segment AB = 2x-7 Segment BD = 3y+13 Segment AC = 4y+12

Segment CD = 3x-20 Segment CE = 5z+14 Segment CB = 20z+8



What are the lengths of:

Segment AB = Segment BD = Segment AC =

Segment CD = Segment CE = Segment BE =

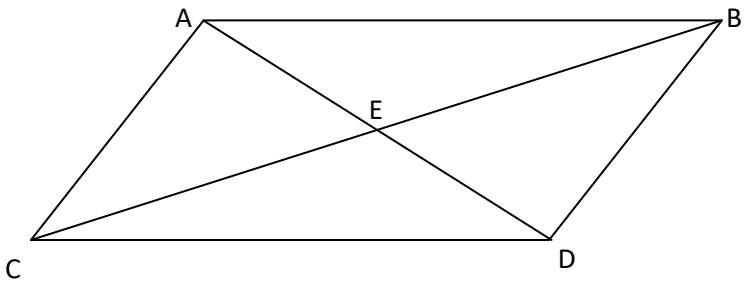
Segment AE = Segment DE = Segment CB =

Segment AD =

2) Given Parallelogram ABCD with the following information:

Segment AE = 2x+13 Segment ED = 3x+4 Segment AC = 4x+15

Segment CD = 5x+6

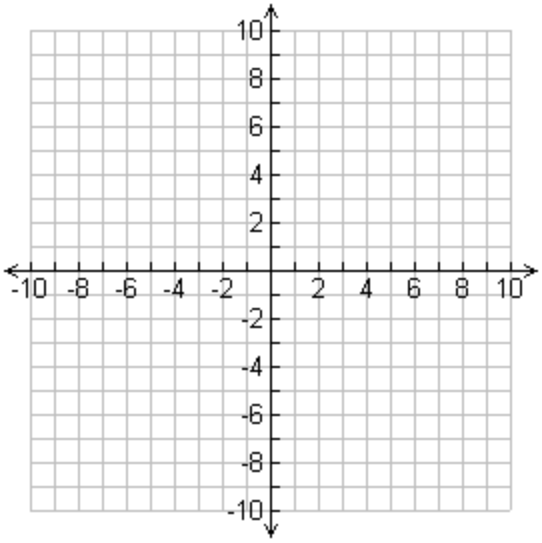


What are the lengths of:

Segment CE = Segment BE = Segment AE =

Segment DE = Segment CB = Segment AD =

3) Given points A (-2, 4) B (4,7) C (1,-2) D (7,1)



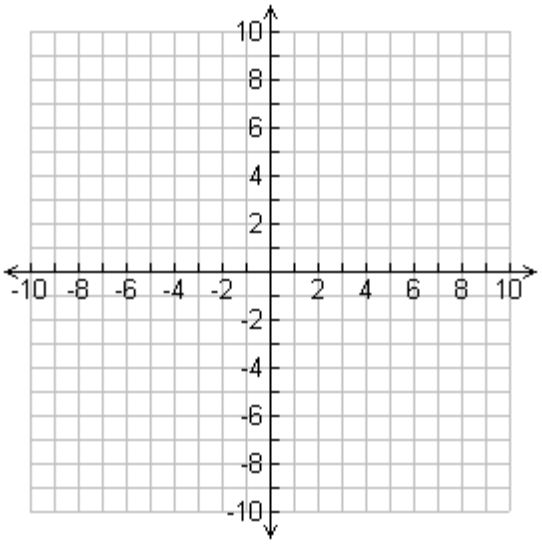
a) Do the diagonals meet at a right angle? Why?

b) Do the diagonals bisect each other? Why?

c) What shape is this? Why?

d) What is the perimeter of the shape?

4) Given points A (-4, 2) B (7,2) C (-6,-4) D (5,-4)



a) Do the diagonals meet at a right angle? Why?

b) Do the diagonals bisect each other? Why?

c) What shape is this? Why?

d) What is the perimeter of the shape?