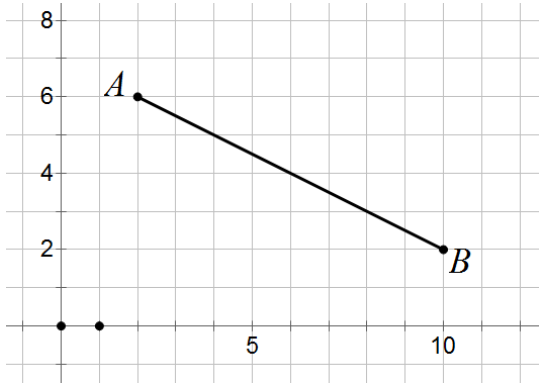


1. The ratio of perimeters of two similar triangles is 9:16. What is the ratio of their altitudes? What is the ratio of their areas?
2. The areas of two similar triangles are in the ratio 4:9. The length of one side of the smaller triangle is 9. What is the length of the corresponding side of the other triangle?
3. If the ratio of the areas of two squares is 27:75, and the perimeter of the smaller is 120, find the perimeter of the larger.
4. The measures of the angles of a quadrilateral are in the ratio of 2:3:4:9. Find the measure of the smallest angle.

5. Find the point F on  $\overline{AB}$  that is  $\frac{3}{4}$  of the way from A to B.

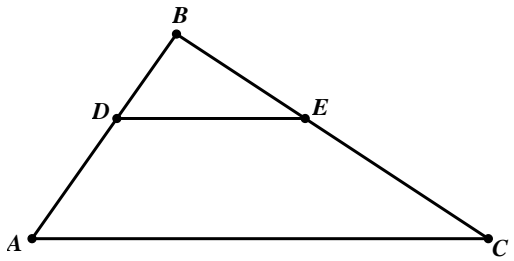


6. Solve each proportion for x.

a)  $3x:10 = (x-2):2$

b)  $\frac{x-3}{7} = \frac{3}{x+1}$

7. Given:  $\overline{DE} \parallel \overline{AC}$



a. If  $BD=3$ ,  $AD=9$ ,  $BE=5$ , find  $EC$ .

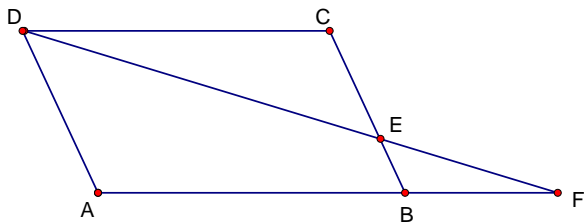
b. If  $AB=15$ ,  $AD=10$ ,  $BC=18$ , find  $EC$ .

c. If  $BD=6$ ,  $AD=12$ ,  $BE=9$ , find  $BC$ .

8. Given:  $ABCD$  is a parallelogram

$\overline{ABF}$

Prove:  $\triangle DCE \sim \triangle FBE$



9. Given:  $\overline{BD} \parallel \overline{CE}$

Prove:  $(AB)(CE) = (BD)(AC)$

