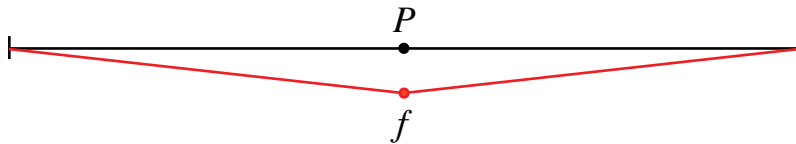


Quiz 4. March 14, 08. Name:

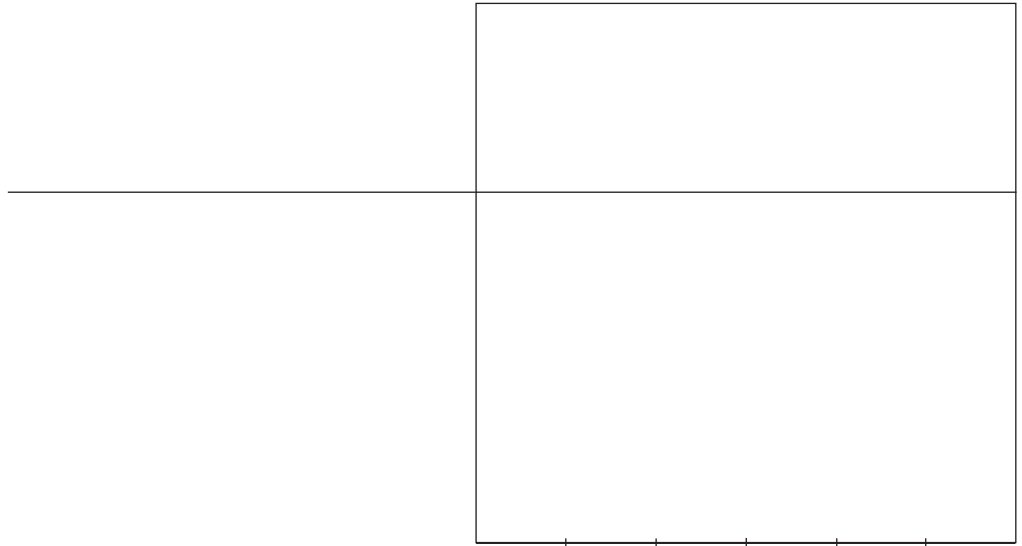
1. Consider the circle with center the point $P = (-4, 3)$ and radius 2 and the line through the center with slope $-\frac{1}{5}$. Find the points of intersection of the circle and the line.

2. Describe with precision and in detail the musical theory that underlies Alberti's theory of proportion. Start your discussion with the figure below.



3. What does the *School of Athens* depict and why is it symbolic of the spirit of the Renaissance?

4. Consider a floor of 36 identical square tiles and reproduce Alberti's perspective drawing of the frame provided. Include a coordinate system, the vanishing point $C = (0, c)$, and the related point



$D = (-d, c)$. Describe with precision and in detail the meaning of the equations $x_1 = \frac{x_0 d}{d+y_0}$ and $y_1 = \frac{c y_0}{d+y_0}$ as well as $x_0 = \frac{c x_1}{c-y_1}$ and $y_0 = \frac{d y_1}{c-y_1}$ in the context of the floor and the drawing and explain the strategy that was used to derive them (without carrying the derivation out).