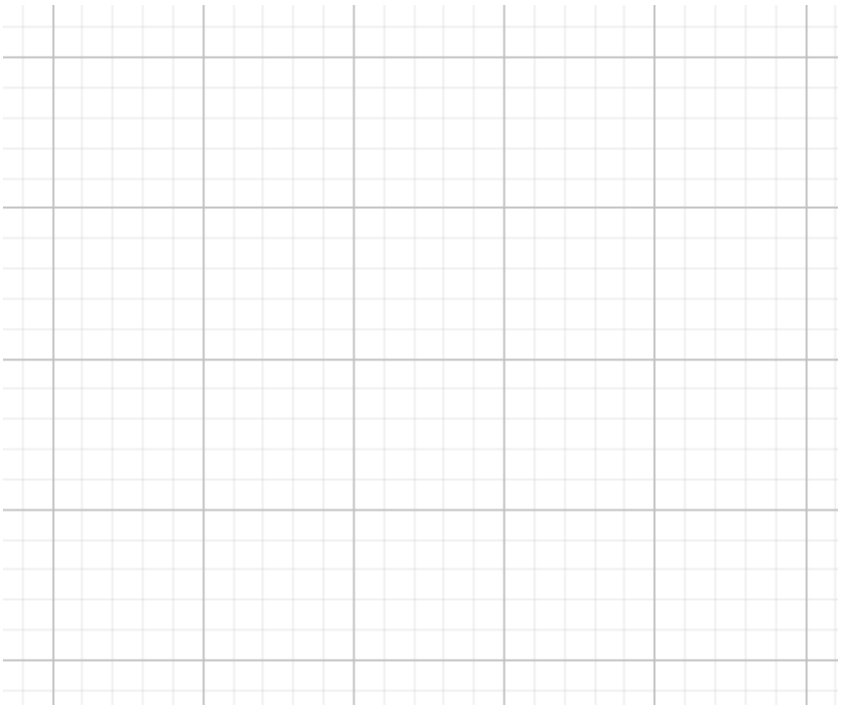
Quiz 12 A ID:

1. Given a circle $C_1 : (x-5)^2 + y^2 = 10$ and a point $P(8,-1)$ on $C_1$, if another circle $C_2$ with radius of $2\sqrt{10}$ intersects $C_1$ at exactly one point $P$. Find all possible equations of $C_2$

2. Graph both $C_1$ and $C_2$ on the same coordinate plane.



3. Find the standard form of a parabola with directrix $y = -\frac{2}{3}$ and the coordinates of focus $\left(\frac{3}{4}, \frac{5}{6}\right)$

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4. Graph the parabola from questions 3 and find the x and y intercepts

5. Given $T: y^2 - 4x + 8y = -28$ , find all possible tangent lines of the T pass through $(0, -2)$

6. Given $C: (x-3)^2 + (y+3)^2 = 26$ and a point $P(8, -2)$ on the circle, find the coordinate of a point Q (also on C) so that the distance from the center of the circle to the chord $\overline{PQ}$ is $2\sqrt{2}$