

[analytic geometry]

1. Find the equation of each of the following lines. Answer in standard form.
 - a. Through $(-5, 1)$ with a slope of $-\frac{1}{5}$
 - b. Through $(-5, 7)$ with a slope of 3
 - c. Through $(3, 4)$ and $(-1, 2)$
 - d. Through $(3, 1)$ with a slope of 0
 - e. Vertical line through $(5, 2)$
 - f. Parallel to $y = 5x + 7$ and with a y-intercept of $(0, -3)$
 - g. A slope of $\frac{1}{4}$ and a y-intercept of -2
 - h. Through $(4, 3)$ and perpendicular to a line through $(0, -5)$ and $(1, -3)$
 - i. Through $(5, 2)$ and with the same x-intercept as $x + 2y - 4 = 0$
 - j. Line through $(5, 2)$ and with an x-intercept of $(-1, 0)$
 - k. Line through the origin and the point $(4, 1)$
 - l. Parallel to y-axis through $(8, -1)$
 - m. Through $(2, -3)$ parallel to $y = 4$
 - n. x-axis
 - o. through the y-intercept of $3x + y - 7 = 0$ and perpendicular to $5x - 8y - 16 = 0$
 - p. having x-intercept of 3 and a y-intercept of 7
 - q. Parallel to $3x - 4y = 7$ and having the same x-intercept as $3x - y = 6$