Lines and Slope

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1. Find the slope and y -intercept for the following lines:
   (a) $y = 3x + 5$
   (b) $y = 5 - 2x$
   (c) $y = \frac{2}{3}x + 10$
   (d) $y - x = 2$
   (e) $25y + 2x + 5 = 0$
   (f) $3x - 5y = 10$
   (g) $7x - 14y + 1 = 9x + 2y$
   (h) $4y - 4x = 2x - 7y + 20 + 2x$
2. Write the equation in slope-intercept form for...
   (a) A line with slope 3 passing through $(4, 5)$
   (b) A vertical line passing through $(3, 4)$
   (c) A horizontal line passing through $(6, 10)$
   (d) The line passing through $(2, -5)$ and $(-1, 4)$
   (e) The line parallel to $y = 2x - 2$ and passing through $(5, 4)$
   (f) The line perpendicular to $y = -\frac{1}{2}x - 7$ and passing through $(-3, -3)$
3. Find the point of intersection
   (a) between $y = -2x + 4$ and $5x + 2y = 8$
   (b) between $y = 6 - 2x$ and the a horizontal line passing through the point $(-9, 9)$