

Exercise 2015-9EH-00005(4)

- (1) (a) Draw $y - 3 = 2x$. Use the attached graph paper.
- (b) Write the equation of the straight line parallel to the line in (a) that passes through the origin. Draw this line on the same system of axes than the line in (a).
- (c) Determine the simultaneous solution of the two lines in (a) and (b).
- (2) Determine whether the point $(2 ; -2)$ lies on the following straight lines:
- (a) $y - 3x = 1$ (b) $y + 2x = 2$
- (3) Determine whether the following pairs of lines are parallel, perpendicular or neither:
- (a) $2x - 2y = 6$ and $x - y - 2 = 0$ (b) $\frac{2y}{3} + 1 = x$ and $x + y = 0$
- (4) Determine the value p if $2px - 5 = y$ is perpendicular to $4y - 2x = 4$.

