We presents below mathematical problems which are related to two concepts: **line & line slope** concept and **system of linear equation** concept.

There are online resources, such as [1], discusses this concepts combination problems.

Problem 1.1.1: Line A contains the point (0,5) and is perpendicular to the line B 4y=x, what is the slope of line A?

Problem 1.1.2: Two points on line m are (3,7) and (-2,5). Line k is perpendicular to line m. What is the slope of line k?

Problem Analysis: The above two problems are medium verbalized algebra-and-geometry math problems, it contains two critical concepts on the way to solve the problem. It requires students reasoning in a forward manner.

Problem 1.2: Line A passes through two points (4,3) and (2,v). The line is perpendicular to line B in which the slope of line B is 1/2. what is the value of v?

Problem Analysis: The above problems are medium verbalized algebra-and-geometry math problems, it contains two critical concepts on the way to solve the problem. In compared to Problem 1.1.1 and 1.1.2, it requires students reasoning in a backward manner.