**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Congruence (G.CO.1)**

Line *m* and line *k* lie on the *xy*-coordinate plane, and line *m* is perpendicular to line *k*. Which of these statements could be true?

Select all statements that apply.

|  |  |  |
| --- | --- | --- |
| Statement | Yes or No | Explain your thinking |
| 1. Line *m* and line *k* intersect. |  |  |
| 1. Line *m* and line *k* have the same slope. |  |  |
| 1. The sum of the slopes of lines *m* and *k* is 0. |  |  |
| 1. Line *m* creates an acute angle at the intersection with line *k*. |  |  |
| 1. The product of the slopes of lines *m* and *k* is -1. |  |  |

Source:

<https://assessmentresource.org/wp-content/uploads/2019/07/High_School_Math_Fall_Block_Item_Set.pdf>

HS Math 2016 – Fall Block, Item VF541585