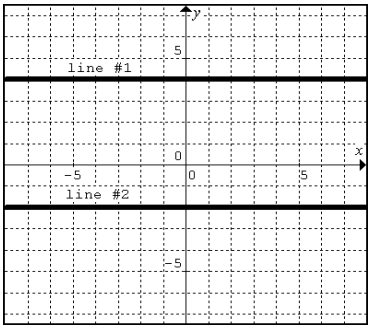
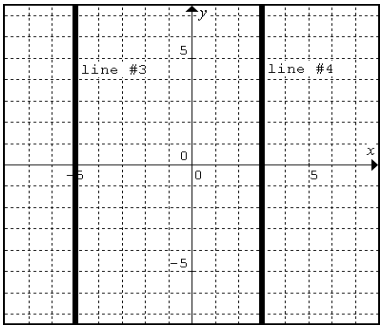
Investigating Slopes

1. Calculate the slope using $\frac{rise}{run}$ of each line.





Line #1 **Line #2**

Line #3 **Line #4**

What can you conclude about the slope of horizontal lines?

What can you conclude about the slope of vertical lines?

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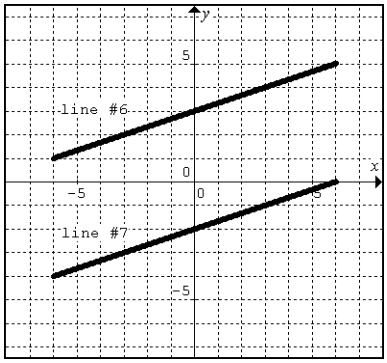
2. The following two lines are **PARALLEL**.

Calculate the slope of each line using $\frac{rise}{run}$.



Line #6 **Line #7**

What can you conclude about the slopes of parallel lines?

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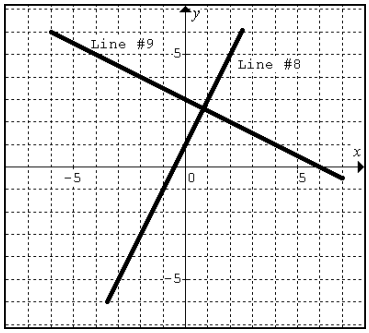
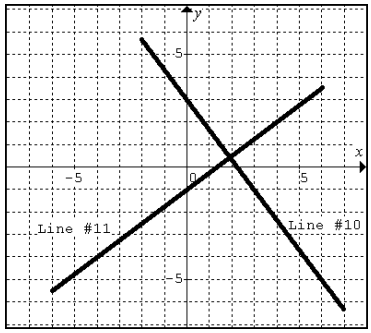
3. The following graphs have lines that are **PERPENDICULAR**. The relationship is a more difficult to see, so we are completing two examples.

Calculate the slope of each line using $\frac{rise}{run}$.





Line #8 **Line #9**

Line #10 **Line #11**

What type of relationship do you see between slope 8&9 and slope 10 & 11?

Lines that are perpendicular have _____ slopes.

When you multiply slopes of perpendicular lines together, the result is always _____.