Key Concepts

- Given two points, we can find the slope of a line using the slope formula.
- We can identify the slope and y-intercept of an equation in slope-intercept form.
- We can find the equation of a line given the slope and a point.
- We can also find the equation of a line given two points. Find the slope and use point-slope form.
- The standard form of a line has no fractions.
- Horizontal lines have a slope of zero and are defined as [latex]y=c[/latex], where c is a constant.
- Vertical lines have an undefined slope (zero in the denominator) and are defined as [latex]x=c[/latex], where c is a constant.
- Parallel lines have the same slope and different *y*-intercepts.
- Perpendicular lines have slopes that are negative reciprocals of each other unless one is horizontal and the other is vertical.

Glossary

slope the change in *y*-values over the change in *x*-values

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