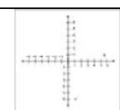
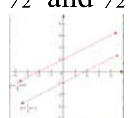
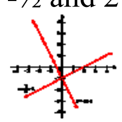
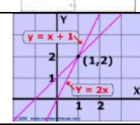
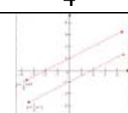
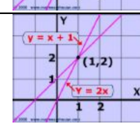
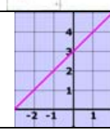
Commonly Confused Symbols and Concepts

Zero – can be an answer to a problem.	0	Ø	No solution - means there can’t be any real answer to the problem.
Infinity - numbers increase with no limit.	∞	ℝ	Real Numbers – number system used to say all existing numbers can be answers in an equation
Multiplication – an operation	8(*x*)	*f*(*x*)	Function – label meaning “answer to the equation (function) when you use *x*.” **Not multiplication**
Negative sign of an integer	-3	3^{-2}	Negative exponent – base and exponent move to the other side of the fraction line and exponent is then positive. **Negative in exponent is not related to sign of the number.**
Division – an operation with specified divisor	⟌	√	Radical – sign for taking the square root of a number
Negative exponent (see above)	3^{-2}	f^{-1}	Inverse function – symbol representation, **not an exponent**
Set-builder notation – identifies elements in a set	{x| …}	[3, ∞)	Interval notation – identifies limits on a number line
Number line – only *x* can be graphed			Coordinate plane – for graphing *x* and *y*
Parallel slopes are equal to each other	½ and ½ 	-½ and 2 	Perpendicular slopes are inverse and opposite sign
Consistent systems of equations – one or more points in common			Inconsistent systems of equation – no points in common
Independent equations – two or more equations create two or more lines (the lines can form consistent or inconsistent systems)			Dependent equations – two or more equations simplify to the same equation and create one line (sharing an infinite number of points)