### Lesson 14 Practice Problems

1. Here are 4 points on a coordinate plane.
* 
	1. Label each point with its coordinates.
	2. Plot a point that is 3 units from point $K$. Label it $P$.
	3. Plot a point that is 2 units from point $M$. Label it $W$.
1. Each set of points are connected to form a line segment. What is the length of each?
	1. A = $\left(3,5\right)$ and B = $\left(3,6\right)$
	2. C = $\left(-2,-3\right)$ and D = $\left(-2,-6\right)$
	3. E = $\left(-3,1\right)$ and F = $\left(-3,-1\right)$
2. On the coordinate plane, plot four points that are each 3 units away from point $P=\left(-2,-1\right)$. Write the coordinates of each point.
* 
1. Noah’s recipe for sparkling orange juice uses 4 liters of orange juice and 5 liters of soda water.
	1. Noah prepares large batches of sparkling orange juice for school parties. He usually knows the total number of liters, $t$, that he needs to prepare. Write an equation that shows how Noah can find $s$, the number of liters of soda water, if he knows $t$.
	2. Sometimes the school purchases a certain number, $j$, of liters of orange juice and Noah needs to figure out how much sparkling orange juice he can make. Write an equation that Noah can use to find $t$ if he knows $j$.
* (From Unit 6, Lesson 16.)
1. For a suitcase to be checked on a flight (instead of carried by hand), it can weigh at most 50 pounds. Andre’s suitcase weighs 23 kilograms. Can Andre check his suitcase? Explain or show your reasoning. (Note: 10 kilograms $≈$ 22 pounds)
* (From Unit 3, Lesson 4.)



© CC BY Open Up Resources. Adaptations CC BY IM.