Lesson 5: The Opposite of a Number’s Opposite

Problem Set

1. Read each description carefully, and write an equation that represents the description.
	1. The opposite of negative seven
	2. The opposite of the opposite of twenty-five
	3. The opposite of fifteen
	4. The opposite of negative thirty-six
2. Jose graphed the opposite of the opposite of $3$ on the number line. First, he graphed point $P$ on the number line $3$ units to the right of zero. Next, he graphed the opposite of $P$ on the number line $3$ units to the left of zero and labeled it $K$. Finally, he graphed the opposite of $K$ and labeled it $Q$.

$$0$$

$$K$$

$$P$$

$$Q$$

* 1. Is his diagram correct? Explain. If the diagram is not correct, explain his error, and correctly locate and label point $Q$.
	2. Write the relationship between the points:

$P$ and $K$

$K$ and $Q$

$P$ and $Q$

1. Read each real-world description. Write the integer that represents the opposite of the opposite. Show your work to support your answer.
	1. A temperature rise of $15$ degrees Fahrenheit
	2. A gain of $55$ yards
	3. A loss of $10$ pounds
	4. A withdrawal of $\$2,000$
2. Write the integer that represents the statement. Locate and label each point on the number line below.
	1. The opposite of a gain of $6$
	2. The opposite of a deposit of $\$10$
	3. The opposite of the opposite of $0$
	4. The opposite of the opposite of $4$
	5. The opposite of the opposite of a loss of $5$