Lesson 63

Objective
Students will compare positive and negative numbers.

Preparation
For the class: Put the number line that is shown on the lesson on a piece of paper. Have this paper up on the wall for the rest of the school year as a reference.

Lesson Plan
Read the three problems at the top of the lesson with the class.

On #1, ask the students which they think is a larger amount of money: $4.00 or -$5.00. ($4.00) The digit 5 has greater value than the digit 4, but because there is a negative sign in front of the 5, it is to the left of zero and is less valuable than positive 4.

The positive sign (+) is usually not written because a number without the negative sign is assumed to be positive.

For #2, ask the students if it is warmer when it is -20° or 10°. *(10°)*

For #3, ask the students if a football player has gained more yardage if he ends the game with 20 yards or -30 yards. *(20 yards)*

Read through the explanation of positive and negative numbers, then do #4 – #11 together. Problems #4 – #7 have been done for them.
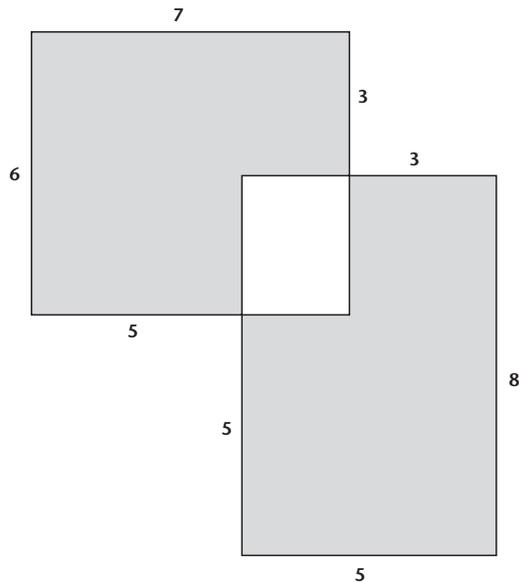
ⓘ *#8 – #11 do not appear on the Lesson Sheets. Please read them aloud.*

Have students look again at #2. Write on the board:
$$-10° \qquad 10°$$

Ask the students if -10° is greater or less than 10°. Add the < symbol between the two numbers. Point out that 10° is warmer than -10°. Do the same for -20° and 10°, -10° and 5°, and 20° and -10°.

Stretch 63
What is the area of the shaded regions?

Answer: 76 square units

Total area:
(7 x 6) + (5 x 8), or 42 + 40 = 82 square units.

The unshaded region's width = 2 (5 - 3). The unshaded region's length = 3 (8 - 5), so the area = (2 x 3) = 6 square units.

Therefore,
82 - 6 = 76 square units