NAME _____ DATE _____

Countdown: 7 Weeks

SCORE _____

1. A radio station runs three different types of commercials each hour. The commercials each last a different amount of time. 4.NF.3c, 4.NF.4b

Commercial type (minutes)	Short ($\frac{1}{6}$ min)	Medium ($\frac{1}{4}$ min)	Long ($\frac{2}{3}$ min)
Commercials per hour	10	12	8
Total time (min)	$1\frac{2}{3}$	3	$5\frac{1}{3}$

Part A: How many minutes does each commercial type take up per hour on the station? Complete the table.

Part B: The station manager claims that the station runs less than 10 minutes of commercials each hour. Is she correct? Explain.

The manager is not correct. $1\frac{2}{3} + 3 + 5\frac{1}{3} =$ 10 minutes, which is not less than 10.

2. In the right column, write the values from the box from that are equivalent to each expression in the left column of the table. 4.NF.4b

$4 \times \frac{4}{9}$	$\frac{16}{9}$, $8 \times \frac{2}{9}$
$\frac{12}{5}$	$4 \times \frac{3}{5}$, $12 \times \frac{1}{5}$
$5 \times \frac{2}{3}$	$10 \times \frac{1}{3}$, $3\frac{1}{3}$

Box
$10 \times \frac{1}{3}$, $4 \times \frac{3}{5}$,
$12 \times \frac{1}{5}$, $\frac{16}{9}$,
$3\frac{1}{3}$, $8 \times \frac{2}{9}$

THINK SMART FOR SBAC
On the actual test, you may drag items to solve a problem. In this book, you will use your pencil to write in the items.

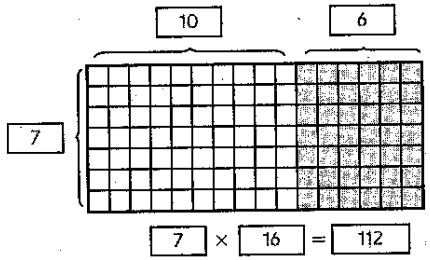
3. Allie picked 8 pounds of strawberries, which was far more than she or her family could eat. Allie gave $1\frac{3}{10}$ pounds to Dov, who said he was going to make a pie. Allie gave $2\frac{9}{10}$ pounds to Nina, who was making strawberry shortcake. After giving away strawberries to Dov and Nina, how many pounds of strawberries did Allie have left? Explain. 4.NBT.3c

$3\frac{4}{5}$ pounds; Sample answer: I added $1\frac{3}{10} + 2\frac{9}{10}$ to get $4\frac{1}{5}$. Then I subtracted $4\frac{1}{5}$ from 8 to get $3\frac{4}{5}$.

4. Tyler collected 8 butterflies. Flor collected 3 times as many butterflies as Tyler. Misha collected 5 times as many butterflies as Flor. How many more butterflies did Misha collect than Tyler? 4.OA.1, 4.OA.2, 4.NBT.4

Misha collected 120 butterflies, which is 112 more than Tyler.

5. What product does this model represent? Fill in the labels for the model and explain how the model helps you find the product. 4.NBT.5



The diagram shows $7 \times 16 = 112$. It uses the distributive property: $7 \times 16 = 7 \times (10 + 6) = (7 \times 10) + (7 \times 6) = 70 + 42 = 112$.