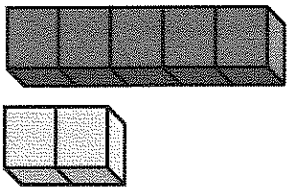
G3-M3-Lesson 12

1. Each  has a value of 9. Find the value of each row. Then, add the rows to find the total.

$7 \times 9 =$ 63



$5 \times 9 = 45$

2 $\times 9 =$ 18

I know each cube has a value of 9. The 2 rows of cubes show 7 nines broken up as 5 nines and 2 nines. It is the break apart and distribute strategy using the familiar fives fact.

$7 \times 9 = (5 +$ 2 $) \times 9$

$= (5 \times 9) +$ (2 $\times 9)$

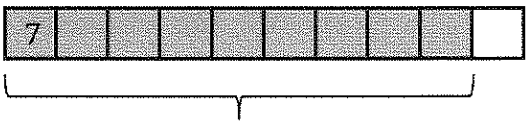
$= 45 +$ 18

$=$ 63

To add 45 and 18, I'll simplify by taking 2 from 45. I'll add the 2 to 18 to make 20. Then I can think of the problem as $43 + 20$.

2. Find the total value of the shaded blocks.

$9 \times 7 =$



This shows a different way to solve. I can think of 7 nines as 9 sevens. 9 is closer to 10 than it is to 5. So instead of using a fives fact, I can use a tens fact to solve. I take the product of 10 sevens and subtract 1 seven.

9 sevens = 10 sevens − 1 seven

$=$ 70 -7

$=$ 63

This strategy made the math simpler and more efficient. I can do $70 - 7$ quickly in my head!

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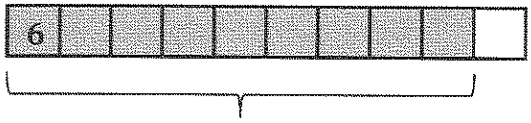
3. James buys a pack of baseball cards. He counts 9 rows of 6 cards. He thinks of 10 sixes to find the total number of cards. Show the strategy that James might have used to find the total number of baseball cards.



9 *sixes* $= 10$ *sixes* $- 1$ *six*

$= 60 - 6$

$= 54$

James bought 54 *baseball cards.*

James uses the tens fact to solve for the nines fact. To solve for 9 sixes, he starts with 10 sixes and subtracts 1 six.

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