Expand-and-Trade Subtraction

Home Link 9-7

NAME DATE

Family Note

In this lesson your child subtracted multidigit numbers using expand-and-trade subtraction. Instead of using base-10 blocks, your child used expanded form to think about making trades. Your child continued to use ballpark estimates to check whether answers made sense.

Example: $62 - 36 = ?$

- Write a number sentence to show a ballpark estimate: $60 - 40 = 20$.
- Write each number in expanded form.

$$\begin{array}{rcl} 62 & \rightarrow & 60 + 2 \\ -\ 36 & \rightarrow & 30 + 6 \end{array}$$

- Look at the 10s and 1s. Can you subtract without making trades? No; so trade 1 ten for 10 ones. Cross out 60 (6 tens) and replace it with 50 (5 tens). Cross out 2 (2 ones) and replace it with 12 (12 ones). Then subtract.

$$\begin{array}{rcl} & & \overset{50}{\not 60} + \overset{12}{\not 2} \\ 62 & \rightarrow & \\ -\ 36 & \rightarrow & 30 + 6 \\ \hline & & 20 + 6 = 26 \end{array}$$

  Add the tens and ones to find the total: $20 + 6 = 26$. So $62 - 36 = 26$.
- Compare your answer to your estimate: 20 is close to 26, so 26 is a reasonable answer.

Please return this Home Link to school tomorrow or as requested by the teacher.

MRB 81, 87–89

Use expand-and-trade subtraction to solve. Use a ballpark estimate to check your answer.

① $55 - 37 = ?$

Ballpark estimate:

Solution:

② $81 - 28 = ?$

Ballpark estimate:

Solution:

$55 - 37 =$ _____

$81 - 28 =$ _____