



Subtract Strategically

Let's consider when to use algorithms and when to use other strategies to subtract.

Warm-up

Number Talk: Threes

Find the value of each expression mentally.

- 2×6

- 3×6

- 2×7

- 3×7



Activity 1

How Would You Subtract?

Use a strategy or an algorithm of your choice to find the value of each difference. Show your reasoning. Organize your work so it can be followed by others.

1. $451 - 329$

2. $382 - 190$



3. $924 - 285$

4. $600 - 478$

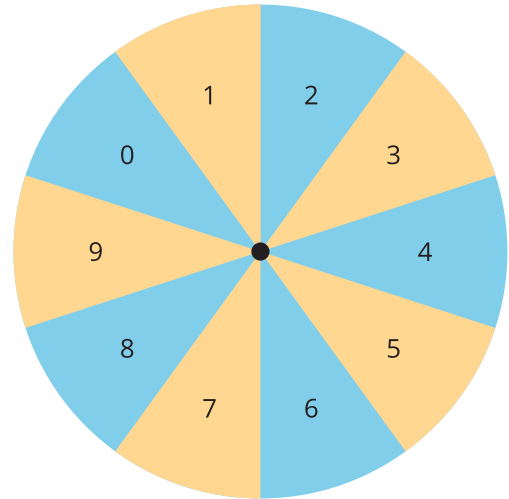
5. $505 - 417$



Activity 2

Greatest Difference, Least Difference

1. Decide with your partner whether you will try to make the greatest difference or the least difference
2. Take turns spinning and recording a digit in the hundreds, tens, or ones place. Continue until your numbers are complete.
3. Find the difference.
4. Compare your values.
5. Write a comparison, using $>$, $<$, or $=$.
6. Play again.



my numbers

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my partner's numbers

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difference

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<p>my numbers</p> <div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> </div>	<p>my partner's numbers</p> <div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> </div>
<p>difference</p> <div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> </div>	

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<p>difference</p> <div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> </div>	

my numbers	my partner's numbers
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<div style="text-align: center; margin-bottom: 10px;">difference</div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="margin: 0 20px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> </div>	

Section B Summary

We learned algorithms to subtract numbers within 1,000. We also learned that we can choose whether to use an algorithm or another strategy for subtracting, based on the numbers.

$$\begin{array}{r}
 \text{400} \quad \text{130} \\
 (\cancel{500} + \cancel{30} + 8) \\
 - (100 + 50 + 6) \\
 \hline
 300 + 80 + 2
 \end{array}$$

step 1

$$\begin{array}{r}
 538 \\
 - 156 \\
 \hline
 2
 \end{array}$$

step 2

$$\begin{array}{r}
 \text{4 } \text{13} \\
 \cancel{5} \cancel{3} 8 \\
 - 156 \\
 \hline
 2
 \end{array}$$

step 3

$$\begin{array}{r}
 \text{4 } \text{13} \\
 \cancel{5} \cancel{3} 8 \\
 - 156 \\
 \hline
 82
 \end{array}$$

step 4

$$\begin{array}{r}
 \text{4 } \text{13} \\
 \cancel{5} \cancel{3} 8 \\
 - 156 \\
 \hline
 382
 \end{array}$$