Module Overview .......................................................................................................................... i
Topic A: Strategies for Adding and Subtracting Within 1,000 ............................... 5.A.1
Topic B: Strategies for Composing Tens and Hundreds Within 1,000 .............. 5.B.1
Topic C: Strategies for Decomposing Tens and Hundreds Within 1,000 .......... 5.C.1
Topic D: Student Explanations for Choice of Solution Methods ...................... 5.D.1
Module Assessments ............................................................................................................. 5.S.1
Lesson 1 Problem Set

Name _______________________________ Date ________________

1. Complete each more or less statement.
   a. 10 more than 175 is _______.
   b. 100 more than 175 is _______.
   c. 10 less than 175 is _______.
   d. 100 less than 175 is _______.
   e. 319 is 10 more than _______.
   f. 499 is 100 less than _______.
   g. _______ is 100 less than 888.
   h. _______ is 10 more than 493.
   i. 898 is ___________ than 998.
   j. 607 is ___________ than 597.
   k. 10 more than 309 is _______.
   l. 309 is ___________ than 319.

2. Complete each regular number pattern.
   a. 170, 180, 190, ______, ______, ______
   b. 420, 410, 400, _____, ______, ______
   c. 789, 689, _____, _____, _____, 289
   d. 565, 575, ______, ______, ______, 615
   e. 724, ______, ______, ______, 684, 674
   f. ______, ______, ______, 886, 876, 866
Lesson 1 Problem Set

3. Complete each statement.

   a. \(389 + 10 \rightarrow ____ + 100 \rightarrow ____\)
   b. \(187 \rightarrow ____ - 100 \rightarrow ____ - 10 \rightarrow ____\)
   c. \(609 \rightarrow ____ - 10 \rightarrow 499 + 10 \rightarrow ____ + ____ \rightarrow 519\)
   d. \(512 \rightarrow ____ - 10 \rightarrow ____ + 100 \rightarrow ____ + 100 \rightarrow ____ + 10 \rightarrow ____\)

4. Solve using the arrow way.

   a. \(212 + 106 = _________\)
   b. \(323 + _________ = 400\)
   c. \(_______ + 511 = 732\)
Solve using the arrow way.

1. $448 + 206 = \underline{654}$

2. $679 + \underline{211} = 890$

3. $\underline{176} + 765 = 945$
Lesson 1 Homework

Name _______________________________ Date ________________

1. Complete each more or less statement.
   a. 10 more than 222 is _______.
   b. 100 more than 222 is _______.
   c. 10 less than 222 is _______.
   d. 100 less than 222 is _______.
   e. 515 is 10 more than _______.
   f. 299 is 100 less than _______.
   g. _______ is 100 less than 345.
   h. _______ is 10 more than 397.
   i. 898 is ___________ than 998.
   j. 607 is ___________ than 597.
   k. 10 more than 309 is _______.
   l. 309 is ___________ than 319.

2. Complete each regular number pattern.
   a. 280, 290, ______, ______, ______, 330
   b. 530, 520, 510, ______, ______, ______
   c. 643, 543, ______, ______, ______, 143
   d. 681, 691, ______, ______, ______, 731
   e. 427, ______, ______, ______, 387, 377
   f. ______, ______, ______, 788, 778, 768
3. Complete each statement.

   a. 235 \rightarrow 10 \rightarrow 100 \rightarrow ___
   b. 391 \rightarrow ___ \rightarrow ___ \rightarrow -10 \rightarrow ___

   c. 417 \rightarrow ___ \rightarrow ___ \rightarrow -100 \rightarrow ___ \rightarrow 297

   d. 311 \rightarrow ___ \rightarrow ___ \rightarrow -10 \rightarrow ___ \rightarrow ___ \rightarrow 10 \rightarrow ___

4. Solve using the arrow way.

   a. 376 + 103 = ___________

   b. 290 + _________ = 400

   c. _________ + 712 = 852
Lesson 2 Problem Set

Name __________________________ Date __________________

1. Solve using place value strategies. Use the arrow way or mental math and record your answers. You may use scratch paper if you like.

   a. 2 hundreds 4 tens + 3 hundreds = ______ hundreds _____ tens

      240 + 300 = _____

   b. 340 + 300 = _____ 140 + 500 = _____ 200 + 440 = _____

   c. 400 + 374 = _____ 274 + 500 = _____ 700 + 236 = _____

   d. 571 + _____ = 871  ____ + 349 = 749  96 + _____ = 696

   e. _____ + 562 = 862  300 + _____ = 783  600 + _____ = 726

2. Solve using place value strategies. Use the arrow way or mental math and record your answers. You may use scratch paper if you like.

   6 hundreds 2 ones - 4 hundreds = ____ hundreds ____ tens ____ ones

   602 - 400 = _____

   a. 640 - 200 = _____ 650 - 300 = _____ 750 - _____ = 350

   b. 462 - 200 = _____ 667 - 500 = _____ 731 - 400 = _____

   c. 431 - _____ = 131 985 - ______ = 585 768 - ______ = 68

   d. _____ - 200 = 662 ______ - 300 = 653 734 - ______ =234
3. Fill in the blank to make true number sentences. Use place value strategies, number bonds, or the arrow way to solve.

a. 200 more than 389 is ___________.

b. 300 more than ___________ is 568.

c. 400 less than 867 is ___________.

d. ___________ less than 962 is 262.

4. Jessica's lemon tree has 526 lemons. She gave away 300 lemons. How many does she have left? Use the arrow way to solve.
Name __________________________ Date ______________

Solve using place value strategies. Use the arrow way or mental math and record your answers. You may use scratch paper if you like.

1. 760 - 500 = _____  880 - 600 = _____  990 - _____ = 590

2. 534 - 334 = _____  _____ - 500 = 356  736 - _______ = 136
1. Solve using place value strategies. Use the arrow way or mental math and record your answers. You may use scratch paper if you like.

   a. 4 hundreds 5 tens + 2 hundreds = ______ hundreds _____ tens

      450 + 200 = _____

   b. 220 + 300 = _____  230 + 500 = _____  200 + 440 = _____

   c. 400 + 368 = _____  386 + 500 = _____  700 + 239 = _____

   d. 119 + _____ = 519  ____ + 272 = 872  62 + _____ = 562

2. Solve using place value strategies. Use the arrow way or mental math and record your answers. You may use scratch paper if you like.

   5 hundreds 8 ones - 3 hundreds = ____ hundreds ____ tens ____ ones

   508 - 300 = _____

   a. 430 - 200 = _____  550 - 300 = _____  860 - _____ = 360

   b. 628 - 200 = _____  718 - 500 = _____  836 - 400 = _____

   c. 553 - _____ = 153  981 - ______ = 381  827 - ______ = 27
3. Fill in the blank to make true number sentences. Use place value strategies, number bonds, or the arrow way to solve.

a. 300 more than 215 is ______________.

b. 300 more than ___________ is 668.

c. 500 less than 980 is ____________.

d. __________ less than 987 is 487.

e. 600 ____________ than 871 is 271.

f. 400 ____________ than 444 is 844.
1. Solve each using the arrow way.

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<tbody>
<tr>
<td>a.</td>
<td>380 + 200</td>
<td>380 + 220</td>
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<tr>
<td>b.</td>
<td>470 + 400</td>
<td>470 + 430</td>
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<td>c.</td>
<td>650 + 200</td>
<td>650 + 250</td>
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<tr>
<td>d.</td>
<td>430 + 300</td>
<td>430 + 370</td>
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2. Solve using the arrow way or mental math. Use scratch paper if needed.

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<tr>
<td>a.</td>
<td>490 + 200 = ____</td>
<td>210 + 490 = ____</td>
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<tr>
<td>b.</td>
<td>230 + 700 = ____</td>
<td>230 + 710 = ____</td>
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<td>c.</td>
<td>260 + 240 = ____</td>
<td>260 + 260 = ____</td>
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<td>d.</td>
<td>160 + 150 = ____</td>
<td>370 + 280 = ____</td>
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<tr>
<td>e.</td>
<td>430 + 290 = ____</td>
<td>660 + 180 = ____</td>
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</table>

3. Solve.
   a. 66 tens + 20 tens = _______ tens  
   b. 66 tens + 24 tens = _______ tens  
   c. 66 tens + 27 tens = _______ tens  
   d. 67 tens + 28 tens = _______ tens  

What is the value of 86 tens? _______
Name ____________________________ Date ______________

1. Solve each using the arrow way.

a. 
   440 + 300  
   360 + 440  
   440 + 380  

b. 
   670 + 230  
   680 + 240  
   250 + 660
Name _______________________________ Date _______________

1. Solve each using the arrow way.

   a. 
   
   \[
   260 + 200
   260 + 240
   260 + 250
   \]

   b. 
   
   \[
   320 + 400
   320 + 480
   320 + 490
   \]

   c. 
   
   \[
   550 + 200
   550 + 250
   550 + 270
   \]

   d. 
   
   \[
   230 + 400
   230 + 470
   230 + 490
   \]
2. Solve using the arrow way or mental math. Use scratch paper if needed.

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<tr>
<td>a.</td>
<td>320 + 200 = _____</td>
<td>280 + 320 = _____</td>
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<td>b.</td>
<td>130 + 500 = _____</td>
<td>130 + 560 = _____</td>
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<tr>
<td>c.</td>
<td>360 + 240 = _____</td>
<td>350 + 270 = _____</td>
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<td>d.</td>
<td>260 + 250 = _____</td>
<td>270 + 280 = _____</td>
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<tr>
<td>e.</td>
<td>440 + 280 = _____</td>
<td>660 + 160 = _____</td>
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</tbody>
</table>

3. Solve.

a. 34 tens + 20 tens = _______ tens
b. 34 tens + 26 tens = _______ tens
c. 34 tens + 27 tens = _______ tens
d. 34 tens + 28 tens = _______ tens

What is the value of 62 tens? _______
1. Solve using the arrow way.

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<tbody>
<tr>
<td>a.</td>
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<tr>
<td>570 - 200</td>
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<td>570 - 270</td>
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<td>570 - 290</td>
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<tr>
<td>b.</td>
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<td>760 - 400</td>
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<td>760 - 460</td>
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<td>760 - 480</td>
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<td>c.</td>
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<td>950 - 500</td>
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<td>950 - 550</td>
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<td>950 - 580</td>
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<td>d.</td>
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<td>820 - 320</td>
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<td>820 - 360</td>
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<td>820 - 390</td>
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</table>
2. Solve using a simplifying strategy. Use scratch paper if needed.

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<tbody>
<tr>
<td>a.</td>
<td>530 - 400 = _____</td>
<td>530 - 430 = _____</td>
</tr>
<tr>
<td>b.</td>
<td>950 - 550 = _____</td>
<td>950 - 660 = _____</td>
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<tr>
<td>c.</td>
<td>640 - 240 = _____</td>
<td>640 - 250 = _____</td>
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<tr>
<td>d.</td>
<td>740 - 440 = _____</td>
<td>740 - 650 = _____</td>
</tr>
</tbody>
</table>

3. Solve.

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<tbody>
<tr>
<td>a.</td>
<td>88 tens - 20 tens = _____</td>
</tr>
<tr>
<td>b.</td>
<td>88 tens - 28 tens = _____</td>
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<tr>
<td>c.</td>
<td>88 tens - 29 tens = _____</td>
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<tr>
<td>d.</td>
<td>84 tens - 28 tens = _____</td>
</tr>
<tr>
<td>e.</td>
<td>What is the value of 60 tens? ________________</td>
</tr>
<tr>
<td>f.</td>
<td>What is the value of 56 tens? ________________</td>
</tr>
</tbody>
</table>
Lesson 4 Exit Ticket

Name __________________________ Date ______________

1. Solve using a simplifying strategy. Show your work if needed.

   \[ 830 - 530 = \_\_\_\_\_\_\_\_ \] \[ 830 - 750 = \_\_\_\_\_\_\_\_ \] \[ 830 - 780 = \_\_\_\_\_\_\_\_ \]

   Solve.
   a. 67 tens - 30 tens = _____ tens. The value is ______.
   b. 67 tens - 37 tens = _____ tens. The value is ______.
   c. 67 tens - 39 tens = _____ tens. The value is ______.
Name _________________________________ Date ________________

1. Solve using the arrow way.

   a. 
   430 - 200
   430 - 230
   430 - 240

   b. 
   570 - 300
   570 - 370
   570 - 390

   c. 
   750 - 400
   750 - 450
   750 - 480

   d. 
   940 - 330
   940 - 360
   940 - 480
2. Solve using a simplifying strategy. Use scratch paper if needed.

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<tbody>
<tr>
<td>a.</td>
<td>330 - 200 = _______</td>
<td>330 - 230 = _______</td>
</tr>
<tr>
<td>b.</td>
<td>440 - 240 = _______</td>
<td>440 - 260 = _______</td>
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<tr>
<td>c.</td>
<td>860 - 560 = _______</td>
<td>860 - 570 = _______</td>
</tr>
<tr>
<td>d.</td>
<td>970 - 470 = _______</td>
<td>970 - 480 = _______</td>
</tr>
</tbody>
</table>

3. Solve.

a. 66 tens - 30 tens = _______  
b. 66 tens - 36 tens = _______  

c. 66 tens - 38 tens = _______  
d. 67 tens - 39 tens = _______  

e. What is the value of 28 tens? ________________  
f. What is the value of 36 tens? ________________
Lesson 5: Use the associative property to make a hundred in one addend.

Date: 10/23/13

Name ________________________________  Date ______________

1. Solve.
   a. 30 tens = ____________  b. 43 tens = ____________
   c. 18 tens + 12 tens = ____________  d. 18 tens + 13 tens = ____________
   e. 24 tens + 19 tens = ____________  f. 25 tens + 29 tens = ____________

2. Add by drawing a number bond to make a hundred. Write the simplified number sentence and solve.
   a. 190 + 130
      \[
      \begin{array}{c}
       \text{10} \\
       \text{120}
      \end{array}
      \]
      \[
      200 + 120 = \underline{\hspace{2cm}}
      \]
   b. 260 + 190
      \[
      \underline{\text{\hspace{2cm}}} = \underline{\hspace{2cm}}
      \]
   c. 330 + 180
      \[
      \underline{\hspace{2cm}} = \underline{\hspace{2cm}}
      \]
Lesson 5: Use the associative property to make a hundred in one addend.

Date: 10/23/13

2. 440 + 280

______________ = __________

e. 199 + 86

______________ = __________

f. 298 + 57

______________ = __________

g. 425 + 397

______________ = __________
Add by drawing a number bond to make a hundred. Write the simplified number sentence and solve.

1. a. $390 + 210$

\[ \underline{\text{___________}} = \underline{\phantom{0}} \]

b. $798 + 57$

\[ \underline{\text{___________}} = \underline{\phantom{0}} \]

Solve.

2. $53 \text{ tens} + 38 \text{ tens} = \underline{\phantom{000}}$
Name _______________________________ Date ________________

1. Solve.
   a. 32 tens = ___________  
   b. 52 tens = ___________
   c. 19 tens + 11 tens = ___________  
   d. 19 tens + 13 tens = ___________
   e. 28 tens + 23 tens = ___________  
   f. 28 tens + 24 tens = ___________

2. Add by drawing a number bond to make a hundred. Write the simplified number sentence and solve.
   a. 90 + 180
      \[ 10 \quad 170 \]
      \[100 + 170\] = ___________
   b. 190 + 460
      \[ \quad \]
      ___________ = ___________

Use the associative property to make a hundred in one addend.
c. 540 + 280

_____________ = _________

d. 380 + 430

_____________ = _________

e. 99 + 141

_____________ = _________

f. 75 + 299

_____________ = _________

g. 795 + 156

_____________ = _________
Lesson 6 Problem Set

Name ____________________________ Date ________________

1. Draw and label a tape diagram to show how to simplify the problem. Write the new number sentence, and then subtract.
   a. \[220 - 190 = \underline{230} - 200 = \underline{_____}\]

   \[\begin{array}{c}
   + 10 \\
   220 \\
   + 10 \\
   190 \\
   \end{array}\]

   b. \[320 - 190 = \underline{_____} = \underline{______}\]

   c. \[400 - 280 = \underline{_____} = \underline{______}\]

   d. \[470 - 280 = \underline{_____} = \underline{______}\]

   e. \[530 - 270 = \underline{_____} = \underline{______}\]
2. Draw and label a tape diagram to show how to simplify the problem. Write a new number sentence, and then subtract. Check your work using addition.

a. 451 - 199 = __________ 452 - 200 = __________

   \[\begin{array}{c|c}
   +1 & 451 \\
   +1 & 199 \\
   \hline
   \end{array}\]

   Check:

b. 562 - 299 = _______________ = __________

   Check:

 c. 432 - 298 = _______________ = __________

   Check:

d. 612 - 295 = _______________ = __________

   Check:
Lesson 6 Exit Ticket

Name ___________________________ Date ________________

**Draw and label a tape diagram to show how to simplify the problem. Write the new number sentence, and then subtract.**

1. \(363 - 198 = \) ______________ = ________

2. \(671 - 399 = \) ______________ = ________

3. \(862 - 490 = \) ______________ = ________
1. Draw and label a tape diagram to show how to simplify the problem. Write the new number sentence, and then subtract.

   a. \[ 340 - 190 = \boxed{\quad} - \frac{\Box}{10} - 200 = \boxed{\quad} \]

   b. \[ 420 - 190 = \boxed{\quad} - \frac{\Box}{10} - 200 = \boxed{\quad} \]

   c. \[ 500 - 280 = \boxed{\quad} - \frac{\Box}{10} - 200 = \boxed{\quad} \]

   d. \[ 650 - 280 = \boxed{\quad} - \frac{\Box}{10} - 200 = \boxed{\quad} \]

   e. \[ 740 - 270 = \boxed{\quad} - \frac{\Box}{10} - 200 = \boxed{\quad} \]
2. Draw and label a tape diagram to show how to simplify the problem. Write a new number sentence, and then subtract. Check your work using addition.

a. \( 236 - 99 = \_
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Lesson 7 Problem Set

1. Circle the student work that shows a correct solution to 543 + 290.

\[
\begin{align*}
543 + 290 &= 533 + 300 = 833 \\
&\quad \downarrow \\
&\quad 533 \quad \text{10}
\end{align*}
\]

Explain the mistake in any of the incorrect solutions.

\[
\begin{align*}
543 + 290 &= 553 + 300 = 853 \\
\quad \downarrow \\
\quad 10 \quad 543 \\
\quad \downarrow \\
\quad 10 \quad 290
\end{align*}
\]

\[
\begin{align*}
543 \quad \rightarrow \quad 743 \quad \rightarrow \quad 803 \quad \rightarrow \quad 833
\end{align*}
\]

2. Circle the student work that correctly shows a strategy to solve 721 - 490.

\[
\begin{align*}
721 - 490 &= 711 - 500 = 211 \\
\quad \downarrow \\
\quad 711 \quad \text{10}
\end{align*}
\]

Fix the work that is incorrect by making a new drawing in the space below with a matching number sentence.

\[
\begin{align*}
731 - 500 &= 231
\end{align*}
\]
3. Two students solved $636 + 294$ using two different strategies.

\[ \begin{align*}
636 & \rightarrow 640 \rightarrow 700 \rightarrow 730 \rightarrow 930 \\
630 & \rightarrow 30 + 300 = 930
\end{align*} \]

Explain which strategy would be easier and why.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4. a. Circle one of the strategies below and use the circled strategy to solve $290 + 374$.

   arrow way / number bond

b. Explain why you chose that strategy.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
1. a. Circle one of the strategies below, and use the circled strategy to solve 490 + 463.

   arrow way / number bond

b. Explain why you chose that strategy.

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
Lesson 7: Share and critique strategies for varied addition and subtraction problems within 1,000.

Date: 10/23/13

Name ___________________________ Date ______________

1. Solve each problem with a written strategy such as a tape diagram, a number bond, the arrow way, the vertical method, or chips on a place value chart.

   a. $370 + 300 = _____$

   b. _____ = $562 - 200$

   c. _____ + 500 = 812

   d. $230 - 190 = _____$

   e. _____ = $640 - 180$

   f. $450 - 290 = _____$

2. Use the arrow way to complete the number sentences.

   a. $420 - 230 = _____$

   b. $340 - 160 = _______

   c. $710 - 350 = _______
3. Solve 867 + 295 using two different strategies.

a.  

b.  

Tell which strategy you found easier to use when solving and explain why.

_________________________________________________________________
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4. a. Circle one strategy to solve the problem 199 + 478.

   arrow way / number bond

b. Solve using the strategy you circled.
1. Solve the following problems using any method. Check your work with the vertical method and number disks.
   a. 301 + 49   402 + 48
   b. 315 + 93   216 + 192
   c. 545 + 346  565 + 226
   d. 222 + 687  164 + 745
2. Solve using mental math or your number disks.

a. 300 + 200

b. 320 + 200

c. 320 + 230

d. 320 + 280

e. 328 + 286

f. 600 + 80

g. 600 + 180

h. 620 + 180

i. 680 + 220

j. 680 + 230
Lesson 8 Exit Ticket

Name ___________________________ Date _______________

1. Solve the following problems using the vertical method, your place value chart, and number disks. Bundle a ten or hundred when necessary.

   a.  378 + 113

   b.  178 + 141
Lesson 8 Homework

Name ________________________________ Date ________________

1. Solve the following problems using the vertical method, your place value chart, and number disks. Bundle a ten or hundred when necessary.
   
   a. 505 + 75
   b. 293 + 114
   c. 364 + 326
   d. 384 + 225

   606 + 84
   314 + 495
   346 + 234
   609 + 351
2. Solve using mental math or your number disks.

a. 200 + 400

b. 220 + 400

c. 220 + 440

d. 220 + 480

e. 225 + 485

f. 500 + 60

g. 500 + 160

h. 540 + 160

i. 560 + 240

j. 560 + 250
1. Solve the following problems using the vertical method and number disks.
   a. $417 + 293$  
   b. $338 + 273$  
   c. $250 + 530$  
   d. $376 + 624$

   a. $526 + 185$  
   b. $625 + 186$  
   c. $243 + 537$  
   d. $283 + 657$
2. Solve using mental math, a simplifying strategy, or number disks.
   a. 270 + 430
   b. 260 + 440
   c. 255 + 445
   d. 258 + 443
   e. 408 + 303
   f. 478 + 303
   g. 478 + 323
Lesson 9 Exit Ticket

Name _______________________________  Date _________________

Solve the following problems using the vertical method, your place value chart, and number disks. Bundle a ten or hundred when necessary.

1. 375 + 197

2. 184 + 338
Lesson 9: Relate manipulative representations to the addition algorithm.

Date: 10/23/13

Name ___________________________ Date ________________

1. Solve the following problems using the vertical method, your place value chart and number disks. Bundle a ten or hundred when necessary.

   a. 205 + 345  
      365 + 406

   b. 446 + 334  
      466 + 226

   c. 537 + 243  
      358 + 443

   d. 753 + 157  
      663 + 258
2. Solve using mental math or number disks.
   a. 180 + 420
   b. 190 + 430
   c. 364 + 236
   d. 275 + 435
   e. 404 + 206
   f. 440 + 260
   g. 444 + 266
Lesson 10 Problem Set

1. Solve using the written method and draw chips on the place value chart. Bundle as needed.

   \[
   \begin{array}{c|c|c}
   \text{Hundreds} & \text{Tens} & \text{Ones} \\
   \hline
   1 & 1 & 7 \\
   \hline
   & & \\
   \hline
   1 & 0 & 0 \\
   \hline
   \end{array}
   \]

   \[
   117 + 170 = \underline{\phantom{100}}
   \]

   \[
   \begin{array}{c|c|c}
   \text{Hundreds} & \text{Tens} & \text{Ones} \\
   \hline
   2 & 1 & 7 \\
   \hline
   & & \\
   \hline
   1 & 7 & 3 \\
   \hline
   \end{array}
   \]

   \[
   217 + 173 = \underline{\phantom{100}}
   \]

   \[
   \begin{array}{c|c|c}
   \text{Hundreds} & \text{Tens} & \text{Ones} \\
   \hline
   3 & 7 & 1 \\
   \hline
   & & \\
   \hline
   1 & 3 & 3 \\
   \hline
   \end{array}
   \]

   \[
   371 + 133 = \underline{\phantom{100}}
   \]
Lesson 10 Problem Set 2.5

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
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<tbody>
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</table>

504 + 269 = ______

2. Solve by drawing chips and a place value chart. Bundle when needed.

a. 546 + 192 = _______

b. 546 + 275 = _______
Lesson 10 Exit Ticket

Name __________________________ Date ________________

Solve by drawing chips on a place value chart. Bundle as needed.

1. 436 + 509 = ________

2. 584 + 361 = ________

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Lesson 10 Homework

Name ____________________________ Date ______________

1. Solve using the written method and draw chips on the place value chart. Bundle as needed.

<table>
<thead>
<tr>
<th></th>
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<th>124 + 260 = _____</th>
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<tbody>
<tr>
<td>Hundreds</td>
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<tr>
<th></th>
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<th>426 + 324 = _____</th>
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<tbody>
<tr>
<td>Hundreds</td>
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<tr>
<th></th>
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<th>362 + 243 = _____</th>
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</thead>
<tbody>
<tr>
<td>Hundreds</td>
<td>Tens</td>
<td>Ones</td>
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<tr>
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</tbody>
</table>
2. Solve by drawing chips and a place value chart. Bundle when needed.

a. $372 + 118 = \underline{\hspace{2cm}}$

b. $248 + 233 = \underline{\hspace{2cm}}$
Lesson 11 Problem Set

Name ________________________________ Date ________________

1. Solve using the written method and draw chips on the place value chart. Bundle when needed.

   Hundreds  |  Tens  |  Ones

   a. 227 + 183 = ______

   Hundreds  |  Tens  |  Ones

   b. 424 + 288 = ______

   Hundreds  |  Tens  |  Ones

   c. 638 + 298 = ______
2. Solve by drawing chips and a place value chart. Bundle when needed.
   a. $307 + 187$
   b. $398 + 207$

d. $648 + 289 = \underline{_______}$
Name ___________________________ Date ________________

Solve by drawing chips and a place value chart. Bundle when needed.

1. 267 + 356 = ___________

2. 623 + 279 = ___________
1. Solve using the written method and draw chips on the place value chart. Bundle when needed.

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<th>Hundreds</th>
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a. \(167 + 224 = \) ______

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b. \(518 + 245 = \) ______

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c. \(482 + 369 = \) ______

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</table>
2. Solve by drawing chips and a place value chart. Bundle when needed.
   a. 456 + 378

   b. 187 + 567
1. Tracy solved the problem $299 + 399$ four different ways.

Explain which strategy is most efficient for Tracy to use and why.

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2. Choose the best strategy and solve. Explain why you chose that strategy.

<table>
<thead>
<tr>
<th>a. 221 + 498</th>
<th>Explanation:</th>
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<table>
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<tr>
<th>b. 467 + 200</th>
<th>Explanation:</th>
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<table>
<thead>
<tr>
<th>c. 378 + 464</th>
<th>Explanation:</th>
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Lesson 12: Choose and explain solution strategies and record with a written addition method.

Date: 10/23/13

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Lesson 12: Choose and explain solution strategies and record with a written addition method.

Date: 10/23/13

Name ____________________________ Date ________________

Choose the best strategy and solve. Explain why you chose that strategy.

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<tr>
<th>1. 467 + 298</th>
<th>Explanation:</th>
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<tr>
<th>2. 300 + 524</th>
<th>Explanation:</th>
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Lesson 12 Homework

Name ___________________________ Date _________________

1. Solve 435 + 290 using two different strategies.

   a. ___________________________

   b. ___________________________

Explain which strategy would be easier and why.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
2. Choose the best strategy and solve. Explain why you chose that strategy.

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<tr>
<th>a. 299 + 458</th>
<th>Explanation:</th>
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<thead>
<tr>
<th>b. 733 + 210</th>
<th>Explanation:</th>
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<table>
<thead>
<tr>
<th>c. 295 + 466</th>
<th>Explanation:</th>
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</thead>
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</table>
Name _________________________________ Date ________________

1. Solve using mental math.
   a. $8 - 6 = \underline{\hspace{2cm}}$ $80 - 60 = \underline{\hspace{2cm}}$ $180 - 60 = \underline{\hspace{2cm}}$ $180 - 59 = \underline{\hspace{2cm}}$

   b. $6 - 3 = \underline{\hspace{2cm}}$ $60 - 30 = \underline{\hspace{2cm}}$ $760 - 30 = \underline{\hspace{2cm}}$ $760 - 28 = \underline{\hspace{2cm}}$

2. Solve using either mental math or the vertical method with number disks. Check your work using addition.
   a. $138 - 17 = \underline{\hspace{2cm}}$ $138 - 19 = \underline{\hspace{2cm}}$

      \[
      \begin{array}{c@{}c@{}c}
      & 138 & \\
      -& 17 & \\
      \hline
      & 121 & \\
      \end{array}
      \]

   b. $445 - 35 = \underline{\hspace{2cm}}$ $445 - 53 = \underline{\hspace{2cm}}$
c. 863 - 170 = _______ 845 - 152 = _______

d. 472 - 228 = _______ 418 - 274 = _______

e. 567 - 184 = _______ 567 - 148 = _______
Name ________________________________ Date __________________

Solve using either mental math or the vertical method with number disks. Check your work using addition.

1. $378 - 117 = \underline{\hspace{2cm}}$  \hspace{2cm} $378 - 119 = \underline{\hspace{2cm}}$

2. $853 - 433 = \underline{\hspace{2cm}}$  \hspace{2cm} $853 - 548 = \underline{\hspace{2cm}}$
1. Solve using mental math.
   a. $9 - 5 = \underline{}$ $90 - 50 = \underline{}$ $190 - 50 = \underline{}$ $190 - 49 = \underline{}$
   b. $7 - 4 = \underline{}$ $70 - 40 = \underline{}$ $370 - 40 = \underline{}$ $370 - 39 = \underline{}$

2. Solve using either mental math or the vertical method with number disks. Check your work using addition.
   a. $153 - 31 = \underline{122}$ $153 - 38 = \underline{}$
      
      \[
      \begin{array}{c}
      153 \\
      -31 \\
      \hline
      122 \\
      \end{array}
      \]
      
      $153 - 31 = 122$ $153 - 38 = \underline{}$

   b. $362 - 49 = \underline{}$ $485 - 177 = \underline{208}$
      
      \[
      \begin{array}{c}
      485 \\
      -177 \\
      \hline
      208 \\
      \end{array}
      \]
Lesson 13: Relate manipulative representations to the subtraction algorithm, and use addition to explain why the subtraction method works.

Date: 10/23/13

3. Complete the number sentence modeled by disks.

\[
\begin{align*}
c. \quad 753 - 290 &= \quad \underline{463} \quad \quad 567 - 290 &= \quad \underline{277} \\

d. \quad 873 - 428 &= \quad \underline{445} \quad \quad 817 - 565 &= \quad \underline{252} \\

e. \quad 973 - 681 &= \quad \underline{292} \quad \quad 748 - 239 &= \quad \underline{509}
\end{align*}
\]

\[
\underline{\text{____}_1} - \underline{\text{____}} = 215
\]
Name ____________________________ Date __________

1. Solve by drawing number disks on a chart. Then, use addition to check your work.

   a. \(469 - 170\)

      Solve vertically or mentally:

      Check:

   b. \(531 - 224\)

      Solve vertically or mentally:

      Check:

   c. \(618 - 229\)

      Solve vertically or mentally:

      Check:
Lesson 14 Problem Set

<table>
<thead>
<tr>
<th></th>
<th>Solve vertically or mentally:</th>
<th>Check:</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. $838 - 384$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. $927 - 628$</td>
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</tbody>
</table>

2. If $561 - 387 = 174$, then $174 + 387 = 561$. Explain why this statement is true using numbers, pictures, or words.
Lesson 14: Use math drawings to represent subtraction with up to two decompositions, relate drawings to the algorithm, and use addition to explain why the subtraction method works.

1. Solve by drawing number disks on a chart. Then, use addition to check your work.

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>a. 375 - 280</td>
<td>Solve vertically or mentally:</td>
<td>Check:</td>
</tr>
<tr>
<td>b. 741 - 448</td>
<td>Solve vertically or mentally:</td>
<td>Check:</td>
</tr>
</tbody>
</table>
Lesson 14 Homework

Name ___________________________ Date ______________

1. Solve by drawing number disks on a chart. Then, use addition to check your work.

<table>
<thead>
<tr>
<th></th>
<th>Solve vertically or mentally:</th>
<th>Check:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>373 - 180</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>463 - 357</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>723 - 584</td>
<td></td>
</tr>
</tbody>
</table>
Lesson 14: Use math drawings to represent subtraction with up to two decompositions, relate drawings to the algorithm, and use addition to explain why the subtraction method works.

Date: 10/23/13

<table>
<thead>
<tr>
<th></th>
<th>Solve vertically or mentally</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. 861 - 673</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th></th>
<th>Solve vertically or mentally</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>e. 898 - 889</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. If 544 + 366 = 910, then 910 - 544 = 366. Explain why this statement is true using numbers, pictures, or words.
Lesson 15: Use math drawings to present subtraction with up to two decompositions, relate drawings to the algorithm, and use addition to explain why the subtraction method works.

Date: 10/23/13

1. Solve by drawing chips on the place value chart. Then, use addition to check your work.

   a. 699 - 210
      
      Solve vertically or mentally: 
      
      Check:

   b. 758 - 387
      
      Solve vertically or mentally: 
      
      Check:

   c. 788 - 299
      
      Solve vertically or mentally: 
      
      Check:
### Lesson 15: Use math drawings to present subtraction with up to two decompositions, relate drawings to the algorithm, and use addition to explain why the subtraction method works.

**Date:** 10/23/13

<table>
<thead>
<tr>
<th>d. 821 - 523</th>
<th>Solve vertically or mentally:</th>
<th>Check:</th>
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<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>e. 913 - 558</th>
<th>Solve vertically or mentally:</th>
<th>Check:</th>
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<tbody>
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</tbody>
</table>

#### 2. Complete all of the if...then statements. Draw a number bond to represent the related facts.

a. If $762 - ________ = 173$, then $173 + 589 = ________$. 

b. If $631 - ________ = 273$, then ________ + 273 = 631.
Solve by drawing chips on the place value chart. Then, use addition to check your work.

1. **583 - 327**

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
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<tbody>
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</tbody>
</table>

Solve vertically or mentally:

Check:

2. **721 - 485**

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<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Solve vertically or mentally:

Check:
1. Solve by drawing chips on the place value chart. Then, use addition to check your work.

<table>
<thead>
<tr>
<th></th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 800 - 675</td>
<td>Solve vertically or mentally:</td>
<td>Check:</td>
<td></td>
</tr>
<tr>
<td>b. 742 - 495</td>
<td>Solve vertically or mentally:</td>
<td>Check:</td>
<td></td>
</tr>
<tr>
<td>c. 657 - 290</td>
<td>Solve vertically or mentally:</td>
<td>Check:</td>
<td></td>
</tr>
</tbody>
</table>
### Lesson 15 Homework

**d. 877 - 398**

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

Solve vertically or mentally:

Check:

**e. 941 - 628**

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
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<tbody>
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</tbody>
</table>

Solve vertically or mentally:

Check:

---

2. Complete all of the if...then statements. Draw a number bond to represent the related facts.

a. If 928 - _______ = 519, then 519 + 409 = _______.

b. If 764 - _______ = 391, then _______ + 391 = 764.
1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle if needed.

a. \[304 - 53 = \underline{\hspace{2cm}}\]

\[
\begin{array}{ccc}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
\end{array}
\]

b. \[406 - 187 = \underline{\hspace{2cm}}\]

\[
\begin{array}{ccc}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
\end{array}
\]

c. \[501 - 316 = \underline{\hspace{2cm}}\]

\[
\begin{array}{ccc}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
\end{array}
\]
Lesson 16 Problem Set

2. Emily said that 400 - 247 is the same as 399 - 246. Write an explanation using pictures, number, or words to prove Emily is correct.

d. 700 - 509 = __________

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
</table>

e. 900 - 626 = __________

2. Emily said that 400 - 247 is the same as 399 - 246. Write an explanation using pictures, number, or words to prove Emily is correct.
Lesson 16 Exit Ticket

1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle if needed.

   a. $604 - 143 = \underline{\hspace{2cm}}$

   
   
   
   
   
   

   b. $700 - 568 = \underline{\hspace{2cm}}$

   
   
   
   
   
   

Name ___________________________ Date ___________________
1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle if needed.

<table>
<thead>
<tr>
<th></th>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 206 - 89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 509 - 371</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 607 - 288</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lesson 16 Homework

2. Andy said that 599 - 456 is the same as 600 - 457. Write an explanation using pictures, number, or words to prove Andy is correct.

   d. 800 - 608 = __________
   
   e. 900 - 572 = __________
### Lesson 17 Problem Set

**Name** _________________________________  **Date** ____________

1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle if needed.

   a. \(200 - 113 = \) ____________

   ![Place Value Chart](chart)

   b. \(400 - 247 = \) ____________

   ![Place Value Chart](chart)

   c. \(700 - 428 = \) ____________

   ![Place Value Chart](chart)
Lesson 17 Problem Set

2. Solve 600 – 367. Then, check your work using addition.

Solution: _____________________________________________________________

Check:  _______________________________________________________________

\[
d. \quad 800 - 606 = \underline{\hspace{2cm}}
\]

\[
e. \quad 901 - 404 = \underline{\hspace{2cm}}
\]
Lesson 17 Exit Ticket

Name __________________________ Date __________

Solve vertically or using mental math. Draw chips on the place value chart and unbundle if needed.

1. 600 - 432 = __________
   
2. 303 - 254 = __________

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>3</td>
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<td>8</td>
<td>3</td>
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</tbody>
</table>

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COMMON CORE

Lesson 17: Subtract from multiples of 100 and from numbers with zero in the tens place.

Date: 10/23/13
1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle if needed.

<table>
<thead>
<tr>
<th></th>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 200 - 123 = __________</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>b. 400 - 219 = __________</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 700 - 542 = __________</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
d. 800 - 409 = ___________

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
</table>


e. 905 - 606 = ___________

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
</table>


2. Solve 800 - 567. Then, check your work using addition.

Solution: 

Check: 

1. a. Use the arrow way and counting on to solve.

   \[300 - 247\]  \[600 - 465\]

   b. Solve vertically and draw a place value chart and chips. Rename in one step.

   \[507 - 359\]  \[708 - 529\]

2. Choose a strategy to solve and explain why you chose that strategy.

   a. \[600 - 437\]

   Explanation:
Lesson 18 Problem Set

3.

a. Prove the student’s strategy by solving both problems to check that their solutions are the same. Explain to your partner why this way works.

b. 808 - 597

Explanation:

Use the smiling student’s simpler strategy to solve the following two problems.

b. 300 - 247
c. 700 - 513
Choose a strategy to solve and explain why you chose that strategy.

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>1. 400 - 265</strong></td>
<td><strong>Explanation:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>2. 507 - 198</strong></td>
<td><strong>Explanation:</strong></td>
<td></td>
</tr>
</tbody>
</table>
Lesson 18 Homework

Name ____________________________ Date ______________

1. a. Use the arrow way and counting on to solve.
   
   \[
   700 - 462 \quad \quad \quad 900 - 232
   \]

   b. Solve vertically and draw a place value chart and chips. Rename in one step.
   
   \[
   907 - 467 \quad \quad \quad 803 - 667
   \]

2. Choose a strategy to solve and explain why you chose that strategy.
   
   a. 700 - 390
   
   Explanation:
Lesson 18

Apply and explain alternate methods for subtracting from multiples of 100 and from numbers with zero in the tens place.

Date: 10/23/13

2. b. 919 - 657

Explanation:

3. a. Explain why 300 - 186 is the same as 299 - 185.

b. Solve 500 - 278 using the simplifying strategy from (a).
Lesson 19: Choose and explain solution strategies and record with a written addition or subtraction method.

Date: 10/23/13

1. Explain how the two strategies to solve 500 - 211 are related.
   a. 
   b. 

   [Diagram of place value chart and subtraction problem]

2. Solve and explain why you chose that strategy.
   a. 220 + 390 = _____
   Explanation:

   [Student's explanation]
Lesson 19 Problem Set

<table>
<thead>
<tr>
<th></th>
<th>b. 547 - 350 = _______</th>
<th>Explanation:</th>
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<tbody>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>c. 464 + 146 = _______</th>
<th>Explanation:</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
<th></th>
<th>d. 600 - 389 = _______</th>
<th>Explanation:</th>
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</thead>
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</tr>
</tbody>
</table>
Name ___________________________          Date ______________

Solve and explain why you chose that strategy.

1. $400 + 590 = _____

   **Explanation:**
   
   
   
   

2. $775 - 497 = ______

   **Explanation:**
   
   
   
   

---

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Lesson 19 Homework

Name ___________________________ Date ______________

1. Solve and explain why you chose that strategy.

<table>
<thead>
<tr>
<th>Expression</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>340 + 250 = _____</td>
<td></td>
</tr>
<tr>
<td>490 + 350 = _____</td>
<td></td>
</tr>
<tr>
<td>519 + 342</td>
<td></td>
</tr>
<tr>
<td>Expression</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>$610 + _____ = 784$</td>
<td></td>
</tr>
<tr>
<td>$700 - 456 = _____$</td>
<td></td>
</tr>
<tr>
<td>$904 - 395 = _____$</td>
<td></td>
</tr>
</tbody>
</table>
Name ______________________________ Date ______________

1. Step 1: Show your strategy to solve.
   Step 2: Find a classmate who used a different strategy, and copy his work into the box.
   Step 3: Discuss which strategy is more efficient.

a. 399 + 237 = __________

   My strategy

   ________’s strategy

b. 400 - 298 = __________

   My strategy

   ________’s strategy
Lesson 20: Choose and explain solution strategies and record with a written addition or subtraction method.

Date: 10/23/13

5.D.21

c. \(548 + 181\)

<table>
<thead>
<tr>
<th>My strategy</th>
<th>_______’s strategy</th>
</tr>
</thead>
</table>

d. \(360 + ______ = 754\)

<table>
<thead>
<tr>
<th>My strategy</th>
<th>_______’s strategy</th>
</tr>
</thead>
</table>

e. \(862 - ______ = 690\)

<table>
<thead>
<tr>
<th>My strategy</th>
<th>_______’s strategy</th>
</tr>
</thead>
</table>
Solve each problem using two different strategies.

1. \(299 + 156 = \) _________
   
   First Strategy
   
   Second Strategy

2. \(547 + \) _______ = 841
   
   First Strategy
   
   Second Strategy
Lesson 20: Choose and explain solution strategies and record with a written addition or subtraction method.

Name ____________________________ Date ________________

1. Solve each problem using two different strategies.

   a. $456 + 244 = \underline{\quad}$

      First Strategy

      Second Strategy

   b. $698 + \underline{\quad} = 945$

      First Strategy

      Second Strategy

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2. Circle a strategy to solve and explain why you chose that strategy.

   a. 257 + 160

   **Arrow way / Algorithm**

<table>
<thead>
<tr>
<th>Solve.</th>
<th>Explanation:</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

   b. 754 - 597

   **Number bond / Arrow way**

<table>
<thead>
<tr>
<th>Solve.</th>
<th>Explanation:</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

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Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.
1. Solve each problem with a written strategy such as a tape diagram, a number bond, the arrow way, the vertical method, or chips on a place value chart.

   a. 220 + 30 = ________
   b. 200 + 380 = ________
   c. 450 + 210 = ________

   d. 490 + 12 = ________
   e. _________ = 380 + 220
   f. 750 – 590 = ________

2. Use the arrow way to solve.

   a. 342 → _______ → 542
   b. 600 → 500 → 490
   c. _______ → _______ → 768

   d. 542 + 207 = ________
   e. 430 + 361 = __________
   f. 660 – 190 = _________
3. Solve each by drawing a model of a place value chart with chips and the vertical method.

<table>
<thead>
<tr>
<th>a. (328 + 259 = )</th>
<th>b. (575 + 345 = )</th>
</tr>
</thead>
</table>

Circle True or False for each number sentence. Explain your thinking using pictures, words, or numbers.

<table>
<thead>
<tr>
<th>c. (466 + 244 = 600 + 100)</th>
<th>d. (690 + 179 = 700 + 169)</th>
</tr>
</thead>
</table>

True / False                   True / False
4. Solve each problem with two written strategies such as a tape diagram, a number bond, the arrow way, the vertical method, or chips on a place value chart.

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>e.</td>
<td>f.</td>
</tr>
<tr>
<td>$398 + 6 = 400 + 5$</td>
<td>$724 - 298 = 722 + 300$</td>
</tr>
</tbody>
</table>

True / False  True / False

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>b.</td>
</tr>
<tr>
<td>$299 + 436 = _____$</td>
<td>$470 + 390 = ____$</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>c.</td>
<td>268 + 122 = ______</td>
</tr>
<tr>
<td>d.</td>
<td>330 – 190 = ______</td>
</tr>
</tbody>
</table>
1. Solve each problem with a written strategy such as a tape diagram, a number bond, the arrow way, the vertical method, or chips on a place value chart.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>460 + 200 = _______</td>
<td>b.</td>
</tr>
<tr>
<td>d.</td>
<td>240 – 190 = _______</td>
<td>e.</td>
</tr>
</tbody>
</table>

2. Use the arrow way to complete the number sentences. Use place value drawings if that will help you.

<p>| | | |</p>
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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>630 → _______ → _______</td>
<td>b.</td>
</tr>
<tr>
<td></td>
<td>630 – _______ = _______</td>
<td>570 – _______ = 290</td>
</tr>
</tbody>
</table>
3. Solve.

Draw a place value chart with chips to model the problems. Show a written subtraction method to check your work.

a. $756 + 136$

Subtraction Number Sentence:

b. $267 + 545$

Subtraction Number Sentence:

Draw a place value chart with chips to model your work. Show a written addition method to check your work.

c. $617 - 229 = \underline{\hspace{2cm}}$

Check:
d. \(700 - 463 = \underline{\hspace{2cm}}\)

Check:

4. Find the missing numbers to make each statement true. Show your strategy to solve.

a. \(300 - 106 = \underline{\hspace{2cm}}\)

b. \(\underline{\hspace{2cm}} = 407 - 159\)

c. \(410 - 190 = 420 - \underline{\hspace{2cm}}\)

d. \(750 - 180 = \underline{\hspace{2cm}} - 200\)

e. \(900 - \underline{\hspace{2cm}} = 600 - 426\)
5. Martha answered the problem 456 – 378 incorrectly. She does not understand her mistake.
   
a. Explain to Martha what she did wrong using place value language.

   Explanation:

   

   

   

   

   

b. Model an alternative strategy for 456 – 378 to help Martha avoid making this mistake again.
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