4th Grade
NTI Math
Assignments

Another Example!

Find 30,283 + 63,423 + 6,538.

Estimate:
30,000 + 63,000 + 7,000 = 100,000

$$\begin{array}{r} \overset{1 1}{\overset{1 1}{3}} 0,283 \\ 63,423 \\ + \ 6,538 \\ \hline 100,244 \end{array}$$

The sum is reasonable because it is close to the estimate of 100,000.

☆ Guided Practice

Do You Understand?

1. **MP.3 Construct Arguments** When adding 36,424 and 24,482, why is there no regrouping in the final step?

2. Science-volunteer teams catalog 7,836 species of insects and 4,922 species of spiders. How many species did the volunteers catalog?

Do You Know How?

For **3–6**, estimate. Then find each sum.

3. $\begin{array}{r} 14,926 \\ + 3,382 \\ \hline \end{array}$

4. $\begin{array}{r} 423,156 \\ + 571,607 \\ \hline \end{array}$

5. $\begin{array}{r} 3,258 \\ + 1,761 \\ \hline \end{array}$

6. $\begin{array}{r} 82,385 \\ + 49,817 \\ \hline \end{array}$

☆ Independent Practice ☆

For **7–16**, estimate. Then find each sum.

> Use estimation to check if your answer is reasonable.

7. $\begin{array}{r} 14,312 \\ + 9,617 \\ \hline \end{array}$

8. $\begin{array}{r} 275,558 \\ + 605,131 \\ \hline \end{array}$

9. $\begin{array}{r} 38,911 \\ + 45,681 \\ \hline \end{array}$

10. $\begin{array}{r} 5,801 \\ + 4,189 \\ \hline \end{array}$

11. $\begin{array}{r} 8,818 \\ + 1,182 \\ \hline \end{array}$

12. $\begin{array}{r} 5,555 \\ + 7,412 \\ \hline \end{array}$

13. $\begin{array}{r} 21,009 \\ + \ 5,529 \\ \hline \end{array}$

14. $\begin{array}{r} 30,080 \\ + 19,187 \\ \hline \end{array}$

15. 29,634 + 12,958 + 6,835

16. 64,673 + 48,262 + 298,918

Day One

Another Example!

Find $68,792 - 33,215$.

$$\begin{array}{r} \overset{8\,12}{68,79\cancel{2}} \\ -\ 33,215 \\ \hline 35,577 \end{array}$$

Estimate:
$69,000 - 33,000 = 36,000$

You can use estimation to check if your answer is reasonable.

☆ Guided Practice

Do You Understand?

1. **MP.3 Construct Arguments** In the Convince Me! problem on the previous page, why was the zero in the hundred thousands place not written in the answer?

2. The total land area of New Jersey is 19,047 square kilometers. Write and solve an equation to show how to find how much larger Gates of the Arctic is than New Jersey.

Do You Know How?

For **3–6**, subtract. Use inverse operations to check your differences.

3. $139,484 - 116,691$

4. $2,164 - 1,398$

5. $49,735 - 25,276$

6. $281,311 - 3,427$

☆ Independent Practice ☆

For **7–14**, subtract. Use inverse operations to check your differences.

7. $\begin{array}{r} 82,376 \\ -\ 47,294 \\ \hline \end{array}$

8. $\begin{array}{r} 653,642 \\ -\ 562,410 \\ \hline \end{array}$

9. $\begin{array}{r} 9,128 \\ -\ 3,753 \\ \hline \end{array}$

10. $\begin{array}{r} 42,648 \\ -\ 8,169 \\ \hline \end{array}$

11. $\begin{array}{r} 425,637 \\ -\ 86,942 \\ \hline \end{array}$

12. $\begin{array}{r} 8,457 \\ -\ 1,946 \\ \hline \end{array}$

13. $\begin{array}{r} 215,714 \\ -\ 176,313 \\ \hline \end{array}$

14. $\begin{array}{r} 85,968 \\ -\ 74,084 \\ \hline \end{array}$

Day Two

☆ Guided Practice

Do You Understand?

1. **MP.3 Construct Arguments** How would you check if the answer for the ticket problem on the previous page is correct?

2. One passenger flew from Oslo to Lima. The flight was 11,033 kilometers. Another passenger flew from Oslo to Los Angeles. The flight was 8,593 kilometers. How many more kilometers was the flight to Lima?
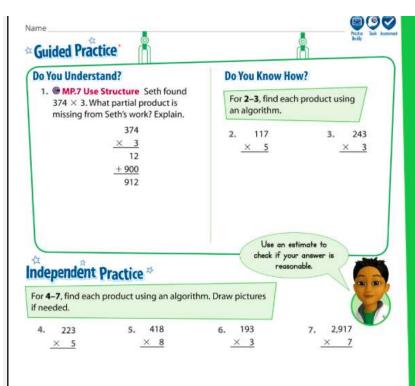
Do You Know How?

For **3–8**, subtract.

3. 6,000
   − 1,773

4. 231,086
   − 172,863

5. 76,810 − 22,645

6. 90,304 − 51,137

7. 101,001 − 8,915

8. 9,050 − 3,461

☆ Independent Practice ☆

For **9–24**, subtract.

Estimate to check if your answer is reasonable.

9. 1,902
   − 1,374

10. 6,502
   − 5,380

11. 63,000
   − 48,673

12. 84,010
   − 3,992

13. 2,025
   − 1,540

14. 31,030
   − 27,426

15. 50,469
   − 22,917

16. 1,830
   − 644

17. 7,203
   − 847

18. 726,003
   − 282,942

19. 4,707
   − 2,016

20. 30,900
   − 22,855

21. 6,090 − 5,130

22. 11,246 − 9,489

23. 790,008 − 643,829

24. 39,603 − 30,922

Name _____

Do You Understand?

1. ● **MP.7 Use Structure** Seth found 374×3. What partial product is missing from Seth's work? Explain.

$$
\begin{array}{r}
374 \\
\times\ \ 3 \\
\hline
12 \\
+\ 900 \\
\hline
912
\end{array}
$$

Do You Know How?

For **2–3**, find each product using an algorithm.

2.
$$
\begin{array}{r}
117 \\
\times\ \ 5 \\
\hline
\end{array}
$$

3.
$$
\begin{array}{r}
243 \\
\times\ \ 3 \\
\hline
\end{array}
$$

> Use an estimate to check if your answer is reasonable.

☆ **Independent Practice** ☆

For **4–7**, find each product using an algorithm. Draw pictures if needed.

4.
$$
\begin{array}{r}
223 \\
\times\ \ 5 \\
\hline
\end{array}
$$

5.
$$
\begin{array}{r}
418 \\
\times\ \ 8 \\
\hline
\end{array}
$$

6.
$$
\begin{array}{r}
193 \\
\times\ \ 3 \\
\hline
\end{array}
$$

7.
$$
\begin{array}{r}
2{,}917 \\
\times\ \ 7 \\
\hline
\end{array}
$$

For **8–11**, find each product using an algorithm.

8. 6×138
9. 7×226
10. 8×242
11. $5 \times 1{,}640$

Another Example!

Ms. Stockton ordered 156 T-shirts each week. How many T-shirts did she order in 4 weeks? Find 156×4.

The algorithm works with any number of digits.

One Way

$$
\begin{array}{r}
156 \\
\times\ \ 4 \\
\hline
24 \\
200 \\
+\ 400 \\
\hline
624
\end{array}
$$

4×6
4×50
4×100

Another Way

$$
\begin{array}{r}
\overset{2\,2}{156} \\
\times\ \ 4 \\
\hline
624
\end{array}
$$

Multiply the ones, then the tens, and then the hundreds. Regroup if needed.

Ms. Stockton ordered 624 T-shirts.

☆ Guided Practice

Do You Understand?

1. Explain how to check if the answer to the Another Example above is reasonable.

2. **MP.2 Reasoning** In the problem below, why is there a 5 recorded in the tens place of the product?

$$
\begin{array}{r}
738 \\
\times\ \ 4 \\
\hline
2,952
\end{array}
$$

Do You Know How?

For **3–10**, find each product. Estimate to check if your answer is reasonable.

3.
$$
\begin{array}{r}
523 \\
\times\ \ 4 \\
\hline
\end{array}
$$

4.
$$
\begin{array}{r}
378 \\
\times\ \ 2 \\
\hline
\end{array}
$$

5.
$$
\begin{array}{r}
157 \\
\times\ \ 5 \\
\hline
\end{array}
$$

6.
$$
\begin{array}{r}
746 \\
\times\ \ 3 \\
\hline
\end{array}
$$

7. 123×9

8. 445×5

9. 27×3

10. 204×6

☆ Independent Practice ☆

For **11–14**, find each product. Estimate to check if your answer is reasonable.

11.
$$
\begin{array}{r}
519 \\
\times\ \ 4 \\
\hline
\end{array}
$$

12.
$$
\begin{array}{r}
28 \\
\times\ \ 3 \\
\hline
\end{array}
$$

13.
$$
\begin{array}{r}
72 \\
\times\ \ 5 \\
\hline
\end{array}
$$

14.
$$
\begin{array}{r}
138 \\
\times\ \ 5 \\
\hline
\end{array}
$$

Day Five

Name _____

☆ Guided Practice

Do You Understand?

1. How is multiplying a 4-digit number like multiplying a 3-digit number?

2. **MP.2 Reasoning** Explain when you would not need to regroup any hundreds into thousands when multiplying a 4-digit number by a 1-digit number.

Do You Know How?

For **3–6**, find each product.

3. 5, 3 8 1
    × _____ 4
    _____

4. 8, 2 1 6
    × _____ 5
    _____

5. 9,734
    ×   6
    _____

6. 7,512
    ×   7
    _____

Independent Practice

Leveled Practice For **7–22**, find each product.

7. 1, 8 4 2
    × _____ 3
    _____

8. 2, 0 8 9
    × _____ 2
    _____

9. 9, 1 5 2
    × _____ 7
    _____

10. 6, 4 5 1
    × _____ 8
    _____

11. 3,287
    ×   1
    _____

12. 8,721
    ×   6
    _____

13. 1,428
    ×   3
    _____

14. 3,756
    ×   9
    _____

15. 6,912
    ×   4
    _____

16. 7,856
    ×   8
    _____

17. 4,005
    ×   5
    _____

18. 1,624
    ×   2
    _____

19. 4,569
    ×   3
    _____

20. 2,146
    ×   7
    _____

21. 1,002
    ×   4
    _____

22. 6,191
    ×   5
    _____

Day Six

Name _____

Do You Understand?

1. A road repair crew can usually fix 825 potholes each week. How many potholes can they fix in 6 weeks?

2. 🌐 **MP.3 Construct Arguments** A tire shop sells 3 tires that cost $175 each, which includes a fourth tire for free. Is this more or less expensive than buying 4 tires that cost $135 each?

Do You Know How?

For **3–10**, find each product.

3. $\begin{array}{r} 74 \\ \times\ 6 \\ \hline \end{array}$

4. $\begin{array}{r} 819 \\ \times\ 5 \\ \hline \end{array}$

5. 4×309

6. 3×175

7. 8×218

8. $6 \times 1{,}741$

9. 29×7

10. $1{,}461 \times 9$

☆ **Independent Practice** ☆

For **11–26**, find each product. Estimate to check if your answer is reasonable.

11. $\begin{array}{r} 77 \\ \times\ 6 \\ \hline \end{array}$

12. $\begin{array}{r} 83 \\ \times\ 5 \\ \hline \end{array}$

13. $\begin{array}{r} 62 \\ \times\ 4 \\ \hline \end{array}$

14. $\begin{array}{r} 89 \\ \times\ 7 \\ \hline \end{array}$

15. $\begin{array}{r} 245 \\ \times\ 3 \\ \hline \end{array}$

16. $\begin{array}{r} 318 \\ \times\ 9 \\ \hline \end{array}$

17. $\begin{array}{r} 736 \\ \times\ 2 \\ \hline \end{array}$

18. $\begin{array}{r} 314 \\ \times\ 8 \\ \hline \end{array}$

19. $4 \times 4{,}347$

20. $6 \times 2{,}716$

21. $7 \times 1{,}287$

22. $3 \times 1{,}942$

23. $2{,}319 \times 5$

24. $1{,}467 \times 5$

25. $2{,}138 \times 9$

26. $9{,}749 \times 5$

Day Seven

☆ Guided Practice

Do You Understand?

1. **⊕ MP.2 Reasoning** Which place do you use to compare the numbers 60,618 and 60,647?

2. Morocco has a total area of 442,300 square kilometers. Uzbekistan has a total area of 447,400 square kilometers. Use >, <, or = to compare the two areas.

Do You Know How?

For **3–7**, complete by writing >, =, or < in each ◯.

3. 2,643 ◯ 2,643

4. 62,519 ◯ 64,582

5. 218,701 ◯ 118,692

6. 32,467 ◯ 32,467

7. 19,219 ◯ 1,921

☆ Independent Practice ☆

For **8–13**, complete by writing >, =, or < in each ◯.

8. 22,873 ◯ 22,774

9. 912,706 ◯ 912,706

10. 22,240 ◯ 2,224

11. 999,999 ◯ 1,000,000

12. 68,425 ◯ 78,425

13. 57,219 ◯ 6,274

For **14–18**, write which place to use when comparing the numbers.

14. 394,284
    328,234

15. 6,716
    6,714

16. 32,916
    32,819

17. 12,217
    11,246

18. 812,497
    736,881

Remember to compare each place value, starting on the left!

Day Eight

☆ Guided Practice

Do You Understand?

1. **● MP.3 Construct Arguments** Explain how to round a number when 7 is the digit to the right of the rounding place.

2. A city's population is 421,906. Round 421,906 to the nearest hundred thousand and to the nearest thousand.

Do You Know How?

For **3–8**, round each number to the place of the underlined digit.

3. 12<u>8</u>,955

4. 85,6<u>3</u>9

5. 9,<u>9</u>24

6. 1<u>9</u>4,524

7. 1<u>6</u>0,656

8. 1<u>4</u>9,590

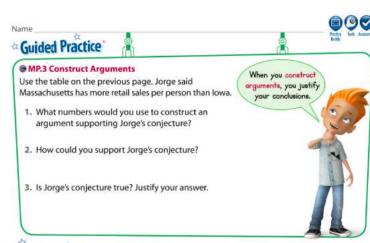## ☆ Independent Practice ☆

For **9–32**, round each number to the place of the underlined digit.

9. 49<u>3</u>,295

10. <u>3</u>9,230

11. 2<u>7</u>7,292

12. 54,<u>8</u>46

13. 4,0<u>2</u>8

14. <u>6</u>38,365

15. 45<u>3</u>,280

16. 17,<u>9</u>09

17. <u>9</u>56,000

18. 55,<u>4</u>60

19. 3<u>2</u>1,679

20. 417,5<u>4</u>7

21. 1<u>1</u>7,821

22. <u>7</u>5,254

23. 9<u>4</u>9,999

24. 66<u>6</u>,821

25. <u>2</u>,420

26. <u>9</u>00,985

27. <u>9</u>,511

28. 73,0<u>6</u>5

29. 6,3<u>2</u>1

30. 29,<u>9</u>98

31. 6<u>1</u>,217

32. <u>7</u>9,945

Day Nine

☆ Guided Practice

● MP.3 Construct Arguments

Use the table on the previous page. Jorge said Massachusetts has more retail sales per person than Iowa.

When you construct arguments, you justify your conclusions.

1. What numbers would you use to construct an argument supporting Jorge's conjecture?

2. How could you support Jorge's conjecture?

3. Is Jorge's conjecture true? Justify your answer.

☆ Independent Practice ☆

● MP.3 Construct Arguments

The population of Gerald's city is three hundred thousand, twenty-seven. Gerald wrote the number as 327,000. Emily lives in a city that has a population of three hundred sixteen thousand, forty-two. Gerald concluded that his city's population is greater than the population of Emily's city.

4. Does Gerald's explanation make sense? Identify any flaws in Gerald's thinking.

5. Construct a math argument that explains why Gerald did not write the population of his city correctly.

6. Correct Gerald's argument. Explain how to compare the populations of Gerald's and Emily's cities.

Day Ten