Topic 2 Adding and Subtracting Whole Numbers and Decimals

RETEACHING

Set A, pages 24–26

Add 53 + 11 + 7 using mental math.

Use compatible numbers.

Tip Compatible numbers are easy to add.

53 and 7 are compatible numbers.

The Commutative Property of Addition allows us to add in any order.

53 + 11 + 7 = 53 + 7 + 11
= 60 + 11
= 71

So, 53 + 11 + 7 = 71

Remember that you can use compatible numbers or compensation to find sums and differences.

Use mental math to add.

1. 67 + 28
   95
2. 130 + 470
   600
3. 35 + 14 + 6
   55
4. 96 + 234 + 4
   334
5. 276 − 99
   177
6. 127 + 99
   226
7. 241 + 2 + 98
   341
8. 86 − 49
   37

Set B, pages 28–29

Round 12.087 to the place of the underlined digit.

12.087 Look at the digit following the underlined digit. Look at 7.

Round to the next greater digit of hundredths because 7 > 5.

12.087 is about 12.09.

Round 9.073 to the place of the underlined digit.

9.073 Look at the digit following the underlined digit. Look at 0.

Since 0 < 5 the digit in the ones place remains the same.

9.073 is about 9.

Remember that rounding a number means replacing it with another number that tells about how much or how many.

Round each number to the place of the underlined digit.

1. 10.245
   10.2
2. 73.4
   70
3. 9.145
   9.15
4. 3.999
   4
5. 67,901
   67,900
6. 13.023
   13.02
7. 99,102
   100,000
8. 45.398
   45.4
9. 0.153
   0.2
10. 0.625
    0.63
11. 8.978
    9
12. 5.739
    5.7
13. 9,999
    10,000
14. 79.5
    80
15. 3.091
    3.1
16. 2.432
    2.4

Set C, pages 30–32

Estimate 19.9 + 17.03.

19.9 → 20
+ 17.03 → + 17
37

Tip Round to the nearest whole number.

19.9 + 17.03 is about 37.

Estimate 22.4 − 16.2.

22.4 → 20
− 16.2 → − 15
5

Tip Use compatible numbers.

22.4 − 16.2 is about 5.

Remember using compatible numbers to estimate is easier than rounding.

Estimate each sum or difference.
Sample estimates are given.

1. 76 + 23
   100
2. 15.01 − 4.4
   11
3. 8,001 + 2,890
   11,000
4. 25,003 − 12,900
   12,000
5. 9.5 + 9 + 8.6
   28
6. 34 + 37 + 30
   100

Set D, pages 34–36

Draw a picture and write an equation. Solve.

Over the summer, Martin exercises 190 minutes more each week than during the school year. If Martin exercises 910 minutes per week in the summer, how many minutes per week does he exercise during the school year?

Let m = minutes per week of exercise during the school year

$910 - 190 = m$
$m = 720$

$$\begin{array}{r} {}^{8}\cancel{9}{}^{1}\cancel{1}0 \\ -\ 190 \\ \hline 720 \end{array}$$

Martin exercises 720 minutes per week during the school year.

Remember that drawing a picture can help you before writing an equation to solve a problem.

Draw a picture and write an equation. Solve.

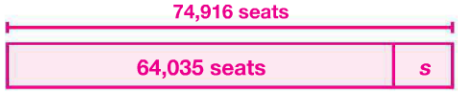
1. Jay's parents celebrated their 25th wedding anniversary in 2005. In what year were they married?
   1–3 See margin.
2. One football stadium, built in 1982, has 64,035 seats. Another stadium, built in 1987, has 74,916 seats. How many more seats does the newer stadium have?
3. In Helen's class, there are 13 girls and 17 boys. Megan's class has the same number of students, but there are 20 girls in her class. How many boys are in Megan's class?

Answers, Set D

1.

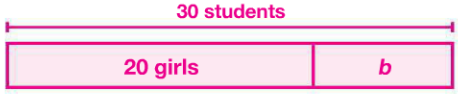
2005 − 25 = y; y = 1980

2.



74,916 − 64,035 = s;
s = 10,881 seats

3.



30 − 20 = b; b = 10 boys