Make an estimate. Write a number model to show your thinking. Try to solve each problem using U.S. traditional addition. Compare your answer with your estimate to see whether your answer makes sense.

SRB
92-93

1
```
   4 9
 + 3 3
 ─────
```

Estimate: _____

2 94 + 47 = _____

Estimate: _____

3
```
   3 7 2
 + 4 8 9
 ───────
```

Estimate: _____

4
```
   4 6 2
 + 9 4 9
 ───────
```

Estimate: _____

5
```
   5 3 8
 + 9 2 8
 ───────
```

Estimate: _____

Try This

6 4,674 + 6,053 = _____

Estimate: _____

7 There are 279 boys and 347 girls at a school assembly.
How many students are at the assembly?

Estimate: _____ students

Answer: _____ students

Estimate 356 + 498. Write a number model to show your thinking. Then solve using partial-sums addition, column addition, and U.S. traditional addition.

SRB
90-93

Estimate: _____

Partial-Sums Addition

Column Addition

U.S. Traditional Addition

Which method do you prefer? Why?

_____

_____

_____

_____

_____

Math Boxes

1 Subtract mentally.

a. $17 - 7 = $ _____

b. $170 - 70 = $ _____

c. $15 - 9 = $ _____

d. _____ $= 150 - 90$

e. $16 - 8 = $ _____

f. _____ $= 160 - 80$

2 In the number 30,516, what does the 3 stand for? Circle ALL that apply.

A.   3,000

B.   3 [10,000s]

C.   30,000

D.   300,000

SRB
78-79

3 Put these numbers in order from least to greatest.

46,000   64,000

4,600   4,006

_____

_____

_____

_____

SRB
81

4 a. Round 81,886 to the nearest . . .

thousand _____

ten-thousand _____

b. Round 245,197 to the nearest . . .

hundred-thousand _____

ten-thousand _____

SRB
85-87

5 **Writing/Reasoning** What do you need to consider when you order the whole numbers in Problem 3?

_____
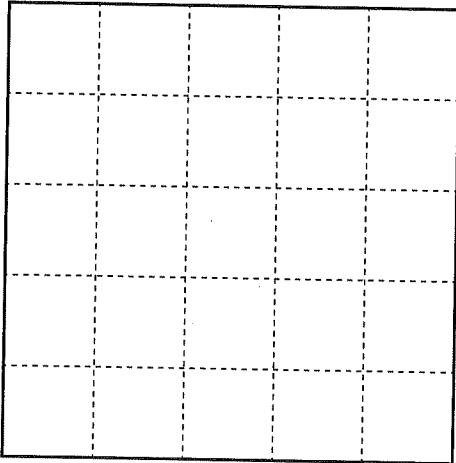
_____

_____

_____

_____

SRB
81

18

Grouping by 25s, 5s, and 1s

At Barbara's Bagel Bakery, Bob packs bagels into boxes that hold 25 bagels, 5 bagels, or 1 bagel.

Box of 25 Bagels

Box of 5 Bagels

Box of 1 Bagel

Bagels come to Bob on a tray. Bob always fills the largest box possible and makes sure each box is full. For each tray of bagels, how many boxes of each size does Bob fill? Complete the table.

Number of Bagels on the Tray	Boxes of 25 Bagels	Boxes of 5 Bagels	Boxes of 1 Bagel
27			
10			
53			
9			

Explain to your partner how you figured out your answers.

Math Boxes

1 Subtract mentally.

a. 11 − 5 = _____

b. 110 − 50 = _____

c. 10 − 6 = _____

d. _____ = 100 − 60

e. 16 − 7 = _____

f. _____ = 160 − 70

2 Draw a line connecting each number in standard form with the equivalent number in expanded form.

50,306   30,000 + 1,000 + 5
or 3 [10,000s] + 1 [1,000s] + 5 [1s]

31,005   60,000 + 40
or 6 [10,000s] + 4 [10s]

60,040   50,000 + 300 + 6
or 5 [10,000s] + 3 [100s] + 6 [1s]

SRB 80

3 Subtract.

a. 8 4 2
      − 5 2 1
      _____

b. 7, 4 6 8
      − 3, 3 9 4
      _____

SRB 94-101

4 Make an estimate. Write a number model to show your strategy.

a. 1,459 + 291

_____

b. 681 − 346

_____

SRB 82-89

5 Use a Place-Value Flip Book or chart. Write the number that has . . .

1 in the ones place
8 in the thousands place
9 in the ten-thousands place
0 in the tens place
6 in the hundred-thousands place
5 in the hundreds place

___ ___ ___, ___ ___ ___

SRB 78-79

6 Write >, <, or = to make each number sentence true.

a. 16 + 11 ____ 47

b. 206 ____ 602

c. 150 − 50 ____ 100

d. 62 + 10 + 10 ____ 62 − 10 − 10

e. 423,726 ____ 413,999

SRB 81

20

U.S. Traditional Subtraction

Make an estimate. Write a number model to show your thinking. Try to solve each problem using U.S. traditional subtraction. Compare your answer with your estimate to see whether your answer makes sense.

SRB
82-84,
100-101

1
```
  5 8
- 3 9
```

Estimate: _____

2 $94 - 56 =$ _____

Estimate: _____

3
```
  6 0 0
- 3 7 9
```

Estimate: _____

4
```
  8 3 6
- 7 8 2
```

Estimate: _____

5
```
  5, 1 7 2
-    2 3 4
```

Estimate: _____

Try This

6
```
  8, 0 0 4
- 3, 5 0 6
```

Estimate: _____

7 The drive to Yuri's grandmother's house is 642 miles. Yuri's family has driven 484 miles so far. How many miles do they have left to drive?

Estimate: _____ miles

Answer: _____ miles

Estimate 825 − 478. Write a number model to show your thinking. Then solve using each of the three subtraction methods: counting-up, trade-first, and U.S. traditional subtraction.

Estimate: _____

SRB
94-101

Counting-Up Subtraction

Trade-First Subtraction

U.S. Traditional Subtraction

Which method do you prefer? Why?

_____

_____

_____

_____

_____

Math Boxes

Math Boxes

1   Subtract.

a.   8 7 6
    − 4 4 1

b.   6 5 2
    − 5 3 8

SRB
94-101

2   Jen's goal is to hike about 200 miles on Wisconsin's state trails. If she hikes 74 miles on Tuscobia, 49 miles on Glacial Drumlin, and 24 miles on Great River, how many more miles will she need to hike to reach her goal? Show your work.

Answer: _____ miles

SRB
83, 92-
93, 100

3   Write >, <, or = to make each number sentence true.

a. $67 - 10$ ____ 57

b. 11 thousand ____ 11,300

c. $400 + 40 + 10$ ____ $400 + 50$

d. $5,000 - 26$ ____ 5 thousand

SRB
81

4   Solve using U.S. traditional addition.

a.   8 7
    + 9 6

b.   2 3 9
    + 2 8 5

SRB
92-93

5   **Writing/Reasoning** Describe how you used U.S. traditional addition to solve Problem 4a.

_____

_____

_____

_____

_____

_____

_____

SRB
92-93

23

Units of Length

Measurement Scales

yards

feet

feet

inches

SRB
186-187
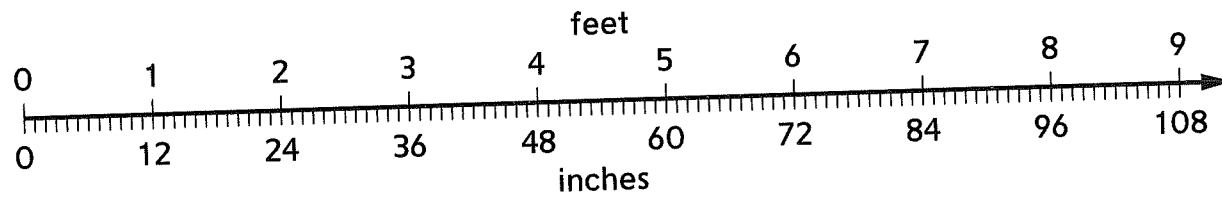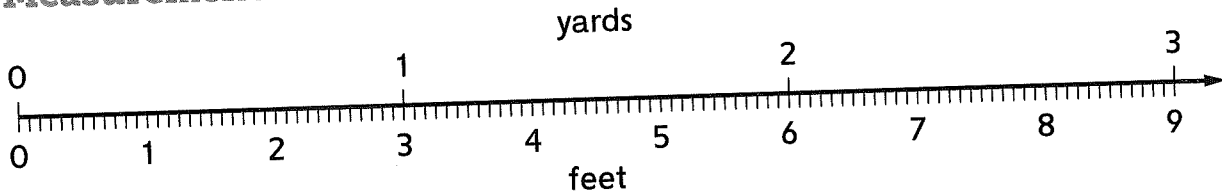
Convert.

1

Feet	Inches
1	12
2	
3	
5	

2

Yards	Feet
1	3
2	
4	
5	

3

Feet	Inches
7	
9	
	120
20	

4

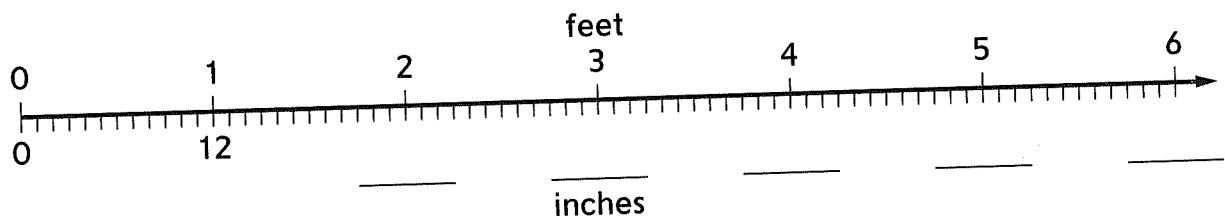| Yards	Feet
7	
	27
10	
20	

Solve the problem. Complete the measurement scale to convert.

5 An Andean condor is about 4 feet tall. A raven is about 2 feet tall. What is the combined height of the two birds in inches? _____ inches

feet

inches

6. The saltwater crocodile can grow to be 7 yards long. The manatee and the American alligator can each grow to be 5 yards long. What is the combined length of the three animals in feet?

Answer: _____ feet

7. The giraffe is the tallest land animal in the world. It can be up to 19 feet tall. The height of the tallest giraffe combined with the height of an African elephant is 35 feet. What is the height of the elephant in inches?

Answer: _____ inches

8. On average, a blue whale is 28 yards in length. A North Pacific right whale is 17 yards in length. What is the difference in length between these two whales in feet?

Answer: _____ feet

Try This

9. The reticulated python is the longest snake in the world. It can measure up to 33 feet. The Barbados thread snake is the smallest known species of snake. It averages slightly under 4 inches in length. Estimate the difference between the length of the Barbados thread snake and the reticulated python.

Estimate: _____ feet

Explain how you got your answer. _____

_____

_____

_____

_____

_____

Math Boxes
Preview for Unit 2

1 Make an array for

   a. 4 * 4

   b. 3 * 6

SRB
53

2 Multiply mentally.

   a. 2 * 1 = _____

   b. _____ = 5 * 0

   c. _____ = 5 * 2

   d. 5 * 4 = _____

   e. 3 * 10 = _____

3 Fill in the missing numbers.

   a. _____, _____, _____, 50,
   55, 60

   Rule: _____

   b. _____, _____, _____, 22, 24,

   _____

   Rule: _____

   c. _____, _____, 42, _____,

   _____, 60

   Rule: _____

4 Gail was counting geese as they flew over her field. The first group contained 27 geese. The second group had 7 more geese than the first group.

Which number model(s) show(s) how many geese are in the second group? Select ALL that apply.
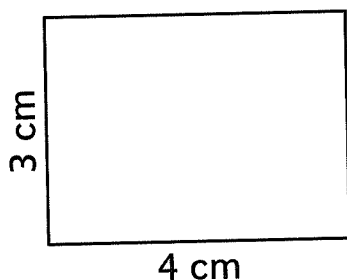
☐ $27 - 7 = g$

☐ $27 + 7 = g$

☐ $27 = g + 7$

☐ $g = 27 + 7$

SRB
37, 47

5 Find the area of the rectangle.

3 cm

4 cm

Area: _____ square cm

SRB
202-204

6 Josephine makes and sells pottery vases. If she charges $9 per vase and she sells 6 vases one week and 7 vases the next, how much will she earn? Show your work.

Estimate: $ _____

Answer: $ _____

SRB
83

Use a straightedge to draw the following:

1   **a.** Draw and label line segment *RT* ($\overline{RT}$).

SRB
226-227,
230-231

      b. What is another name for $\overline{RT}$? _____

2   **a.** Draw and label line *BN* ($\overleftrightarrow{BN}$). Draw and label a point *T* on it.

      b. What are two other names for $\overleftrightarrow{BN}$? _____

3   **a.** Draw and label ray *SL* ($\overrightarrow{SL}$). Draw and label a point *R* on it.

      b. What is another name for $\overrightarrow{SL}$? _____

      c. Under ray *SL* ($\overrightarrow{SL}$), draw and label ray *XM* ($\overrightarrow{XM}$) so it is parallel to ray *SL* ($\overrightarrow{SL}$).

4   *A* ●   ● *B*

        D ●   ● *C*

      a. Using points *A*, *B*, *C*, and *D*, create a shape that has 2 pairs of parallel line segments.

      b. Name the parallel line segments. _____

_____

Math Boxes

Math Boxes

① Kenji is following a 22-week training schedule to prepare for a marathon. The last four weeks call for these weekly running totals: 58 km, 45 km, 37 km, and 29 km. How far will Kenji run in the last four weeks of training? Show your work.

Estimate: _____

Answer: _____ km

SRB
92-93

② Draw and label line QR ($\overleftrightarrow{QR}$). Draw point S on it.

What are two other names for line QR?

_____

SRB
226-227

③ Write the number in standard form.

a. 9 [100s] + 3 [1s] = _____

b. 5 [1,000s] + 4 [10s] = _____

c. 4 [10,000s] + 5 [1,000s] + 6 [100s]

   + 9 [1s] = _____

d. 2 [100,000s] + 6 [1,000s] + 7 [100s]

   + 4 [1s] = _____

SRB
80

④ Name as many rays as you can in the figure below.

M   N   O

_____

_____

_____

SRB
226-227
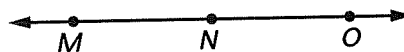
⑤ **Writing/Reasoning** Explain how you used your estimate to see if your answer to Problem 1 was reasonable.

_____

_____

SRB
83

28

Angles

SRB
228-229,
233

1. Draw ∠BAC. What is another name
   for ∠BAC? _____

   C•

2. What is the vertex of ∠BAC? Point _____
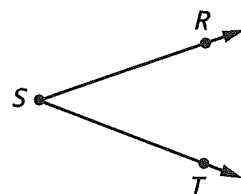
   A•   •
                         B

3. a. What type of angle is angle BAC in Problem 1? _____

   b. How do you know? _____

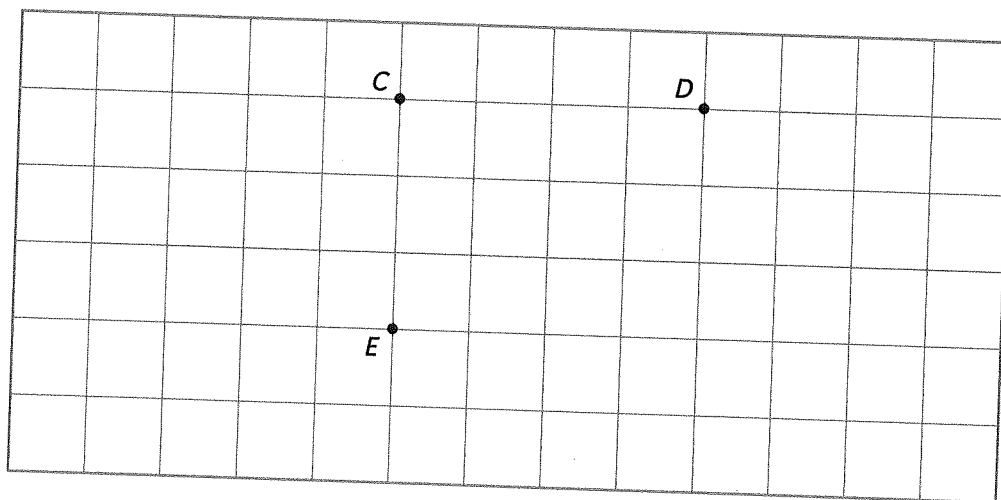4. Feng said the name of this angle is ∠SRT. Is he right? Explain.

   _____

   _____

                                                              R
                                                            •
                                           S•

                                                            •
                                                            T

5. Use the points shown on the grid below and a straightedge to draw triangle CDE.

   a. What type of angle is angle DCE? _____

   b. What type of triangle is triangle CDE? _____

   c. Name the perpendicular line segments. _____

29

Math Boxes

Math Boxes

---

1 Subtract using U.S. traditional subtraction.

a.   3 3 4
    − 2 3 8

b.   8 8 1
    − 4 3 6

SRB
100-101

---

2 Eric's car travels about 256 miles on a full tank of gas. With the gas tank full, Eric drove 66 miles to visit cousins. Then he drove 78 miles to visit Grandma. How many more miles can Eric drive before he runs out of gas? Show your work.

Answer: _____ miles

SRB
83, 92-
93, 100

---

3 Write >, <, or = to make each number sentence true.

a. 55,699 _____ 45,609

b. 67,749 _____ 66,749

c. 858,193 _____ 808,192

d. 2 thousand _____ 20 hundred

e. 208,775 _____ 2 million

SRB
83

---

4 Add using U.S. traditional addition.

a.   3 5 4
    + 5 8 9

b.   8 0 9
    + 6 9 3

SRB
92-93

---

5 **Writing/Reasoning** Explain how you write Problem 4b in expanded form.

_____

_____

_____

SRB
80

30

Math Boxes

1 In Kendra's city, most blocks are about 328 feet long. If Kendra runs 3 blocks before she rests, about how many feet will she have run?

(A) 656 feet

(B) 1,084 feet

(C) 3,328 feet

(D) 984 feet

(E) 331 feet

SRB 92-93

2 Draw and label line *AB*.

Draw point *C* on it.

What are two other names for line *AB*?

_____

SRB 226-227

3 **a.** 600,000 + 5,000 + 700 + 8 is the expanded form for what number?

____ ____ ____ , ____ ____ ____

b. 3,000,000 + 200,000 + 6,000 + 40 + 7 is the expanded form for what number?

____ , ____ ____ ____ , ____ ____ ____

SRB 80

4 Name as many line segments as you can in the figure below.

_____

_____

SRB 226-227
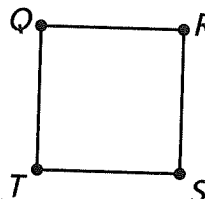
5 **Writing/Reasoning** Describe how you could use U.S. traditional addition to solve Problem 1.

_____

_____

_____

_____

SRB 92-93

31

Finding the Perimeter
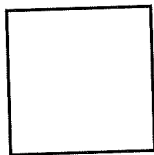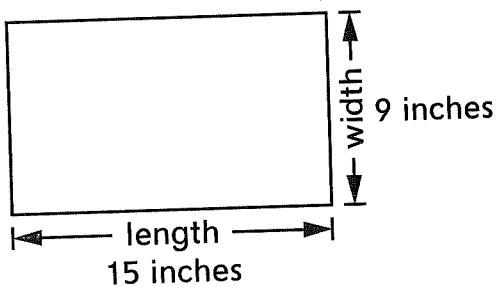
Math Message

2 feet   Find the perimeter of the square. _____ feet

How did you find the perimeter? _____

_____

_____

How many inches is that? _____ inches. Explain how you converted from feet to inches.

_____

_____

_____

1

width — 9 inches

length — 15 inches

What is the perimeter? _____ inches

Write an equation for the perimeter of the rectangle.

Equation: _____ inches

2 Measure the lengths and widths of your journal and 2 different rectangular objects in your classroom. Measure to the nearest inch. Record the measurements. Use the measurements to find the perimeter of each object.

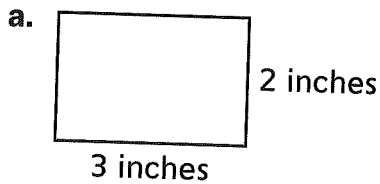| Object Measured	Length	Width	Formula	Perimeter
Math Journal				

32

Perimeter Formulas for Rectangles:

$$p = l + l + w + w \qquad p = 2l + 2w \qquad p = 2 * (l + w)$$

SRB
200

3 Use a formula to find the perimeters of the rectangles.

a.

2 inches

3 inches

Equation: _____

Perimeter: _____ inches

b.
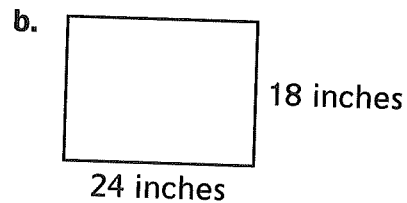
18 inches

24 inches

Equation: _____

Perimeter: _____ inches

4 Jerry wants to build a rectangular vegetable garden with a fence around it. He wants the garden to be 8 feet long and 4 feet wide. Sketch his garden. Find the perimeter. Show your work.

Perimeter: _____ feet

5 Moonja's parents are building a deck. A diagram is to the right. They want the perimeter to be 44 feet. One side must be 12 feet long. What is the measurement of the width?

?

12 feet
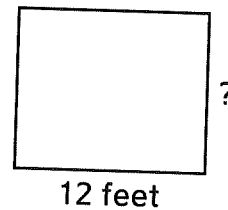
Width: _____ feet

6 Draw a rectangle with a perimeter of 16 centimeters. Label the lengths of the sides.

33

Math Boxes

1 Make 2 different arrays for 6.

SRB 53

2 Multiply mentally.

a. $8 * 1 = $ _____

b. _____ $= 9 * 0$

c. _____ $= 5 * 6$

d. $5 * 50 = $ _____

e. $7 * 10 = $ _____

3 Fill in the missing numbers.

a. 16, 20, 24, _____,

_____, _____

Rule: _____

b. 15, _____, 21, _____,

27, _____

Rule: _____

c. _____, _____, 30,

_____, _____, 60

Rule: _____

4 The height of Angel Falls, the tallest waterfall, is 240 meters more than Yosemite Falls in California. Tugela Falls, the second highest waterfall, is 31 meters shorter than Angel Falls. If Yosemite Falls is 739 meters high, how high is Tugela Falls?
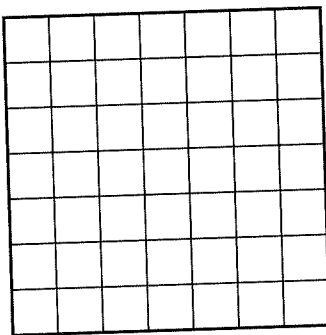
A.   979 meters

B.   948 meters

C.   1,010 meters

D.   468 meters

SRB 47, 83

5 Shade tiles in the grid to make an array for 6 × 6. How many tiles did you shade?

_____

SRB 202-204

6 On average, a painter can cover about 300 square feet with 1 gallon of paint. If the painter has 6 gallons of paint in his van and 5 gallons in his store, about how many square feet can he cover?

Estimate: _____ square feet

Answer: _____ square feet

SRB 83

34