New Vocabulary
addend
sum

Basic Facts Through Sums of 18

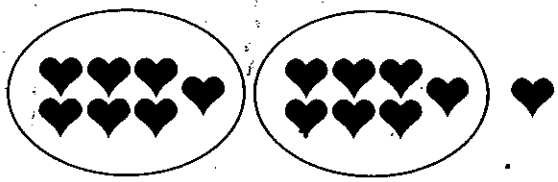
Name _____ Class _____ Date _____

GET STARTED

1. $7 + 7 = \_\_\_\_\_$

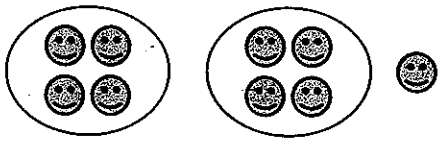
2. $\begin{array}{r} 4 \\ +\ 4 \\ \hline \end{array}$

3. $7 + 8 = \_\_\_\_\_$



_____ + _____ = _____
_____ + 1 = _____

4. $4 + 5 = \_\_\_\_\_$



_____ + _____ = _____
_____ + 1 = _____

5. $7 + 4 = \_\_\_\_\_$

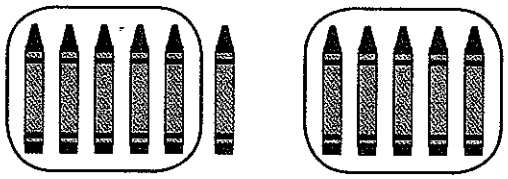
6. $7 + 6 = \_\_\_\_\_$
_____ + _____ + 1 = _____

BUILD THE CONCEPT

Sonja has 6 crayons. The teacher gives her 5 more crayons.

Sonja: 6 + 5

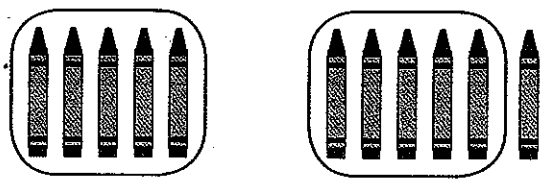
_____ + _____ = _____
_____ + 1 = _____



Darnell has 5 crayons. The teacher gives him 6 more crayons.

Darnell: 5 + 6

_____ + _____ = _____
_____ + 1 = _____



Sonja and Darnell each have _____ crayons.

TRY IT TOGETHER

Find each sum.

7 9 + 3 = _____

8 4 + 3 = _____

_____ + _____ = _____

_____ + 1 = _____

9 9 + 6 = _____

10 2 + 3 = _____

WORK ON YOUR OWN

HOW TO

Add Whole Numbers

Using Symbols	Using Words
1. 8 + 9 **8** + **8** + 1 = 16 + **1** = 17	Use the doubles plus 1 strategy when one addend is one more than the other addend. Double the lesser addend. Add 1 more to find the sum.
2. 8 + 3 8..., **9, 10, 11** 8 + 3 = 11	If the doubles plus 1 strategy cannot be used, use the counting on strategy. Start with the greater addend. Count on the other addend to find the sum.

Using a Problem-Solving Plan

Name _____ Class _____ Date _____

GET STARTED

1. $5 + 4 =$ _____

2. $8 + 4 =$ _____

3. $7 + 4 =$ _____

4. Conner has 6 comic books. He bought 2 more comic books. How many total comic books does Conner have?

   a. **Find:** _____

   b. **How?** _____

   _____

   c. **Solve.** _____ + _____ = _____ comic books

   d. **Is the answer reasonable? Explain.** _____

   _____

5. Lisa and Bryan each have 5 pencils. How many pencils do they have in all?

   a. **Find:** _____

   b. **How?** _____

   _____

   c. **Solve.** _____ + _____ = _____ pencils

   d. **Is the answer reasonable? Explain.** _____

   _____

TRY IT TOGETHER

Solve the problem.

6 Sara bought 3 apples and 4 pears at the fruit stand. How many total pieces of fruit did Sara buy?

a. **Find:** _____

b. **How?** _____

_____

c. **Solve.** _____ + _____ = _____ pieces of fruit

d. **Is the answer reasonable? Explain.** _____

_____

WORK ON YOUR OWN

HOW TO

Solve Story Problems Using a Problem-Solving Plan

On Monday, Sam had 7 baseball cards. On Tuesday, Sam bought 5 more baseball cards. How many baseball cards does Sam have in all now?

1. **Find:** how many baseball cards Sam has in all
2. **How?** Use a Problem-Solving Plan to find what operation to use, then solve.
3. **Solve.** Add the number of baseball cards Sam had on Monday to the number of baseball cards he bought on Tuesday.

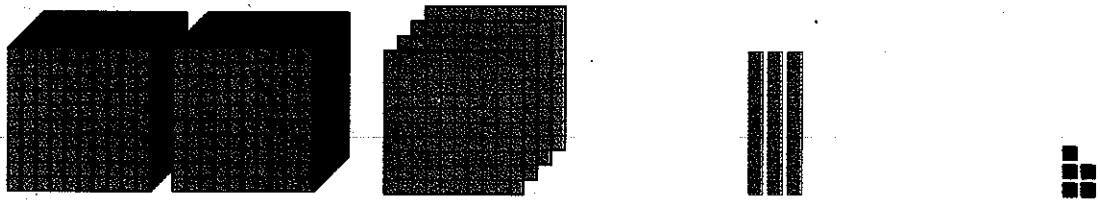
   $7 + 5 = 12$ baseball cards
4. **Is the answer reasonable? Explain.** Yes, starting with 7 and counting on 5 more is 12.

New Vocabulary
digit
place value
value

Place Value

Name _____ Class _____ Date _____

GET STARTED

1. 

2.

Thousands	Hundreds	Tens	Ones
	_____	_____	

3. 590

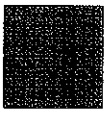
Place		Value
_____	hundreds =	_____
_____	tens =	_____
_____	ones =	_____

4. 4,076

Place		Value
_____	thousands =	_____
_____	hundreds =	_____
_____	tens =	_____
_____	ones =	_____

BUILD THE CONCEPT

Stan placed these base-10 pieces on a place value mat:

Thousands	Hundreds	Tens	Ones
			
___ thousands	___ hundred	___ tens	___ ones

What number did Stan model? _____

Place		Value
_____	thousands =	_____
_____	hundred =	_____
_____	tens =	_____
_____	ones =	_____

TRY IT TOGETHER

Give the place value and value of each green digit.

5

Thousands	Hundreds	Tens	Ones
____	____	____	

312 place:_____ value:_____

6

Thousands	Hundreds	Tens	Ones
____	____	____	

9,6**4**0 place:_____ value:_____

7 **2**5
place:_____
value:_____

8 1,4**0**2
place:_____
value:_____

WORK ON YOUR OWN

HOW TO

Understand Place Value and Value of Digits

Using Symbols

1. 1,46**2**
2 ones = 2

Using Words

The digit to the far right shows the number of ones. Write the value.

2. 1,4**6**2
6 tens = 60

1,4**6**2
4 hundreds = 400

1,4**6**2
1 thousand = 1,000

Continue moving to the left until each digit's place value and value have been named.

New Vocabulary
even number
odd number

Odd and Even Numbers

Name _____ Class _____ Date _____

GET STARTED

1. 0, 2, 4, _____, _____

2. 1, 3, 5, _____, _____

3.

4. 89 ones digit: _____ number: _____

5. 146 ones digit: _____ number: _____

BUILD THE CONCEPT

5 + 1 = _____ 6 + 2 = _____

7 + 3 = _____ 8 + 4 = _____

odd + odd = _____ even + even = _____

7 + 8 = _____ 2 + 5 = _____

3 + 6 = _____ 8 + 3 = _____

odd + even = _____ even + odd = _____

TRY IT TOGETHER

Tell whether each number is odd or even.

6. 53 _____

7. 167 _____

8. 8 _____

9. 390 _____

WORK ON YOUR OWN

HOW TO

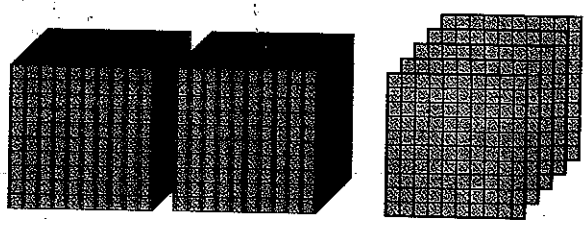
Recognize Odd and Even Numbers

Using Symbols		Using Words
1. 705 The ones digit is **5**.	24 The ones digit is **4**.	Look at the ones digit of the number.
2. The ones digit 5 is 1, 3, 5, 7, or 9. The number 705 is **odd**.	The ones digit 4 is 0, 2, 4, 6, or 8. The number 24 is **even**.	If the ones digit is 0, 2, 4, 6, or 8, then the number is even. If the ones digit is 1, 3, 5, 7, or 9, then the number is odd.

Expanded Notation

Name _____ Class _____ Date _____

GET STARTED

1. 

2. **a.** _____ thousands _____ hundreds _____ tens _____ ones

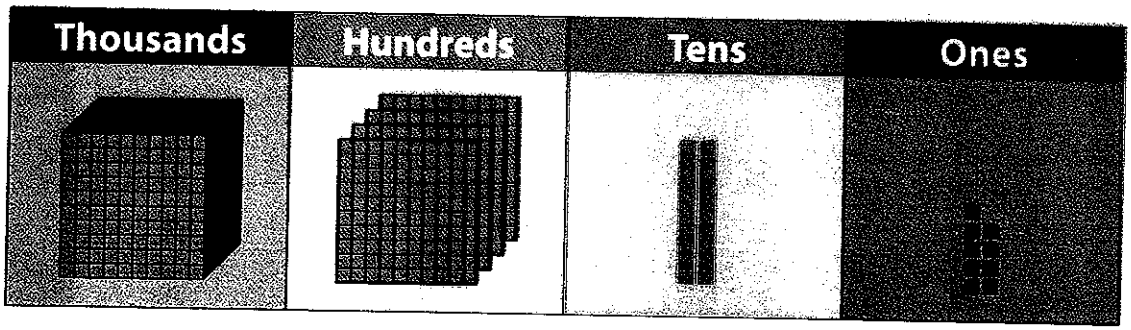
   b. _____ _____ _____ _____

3.

Thousands	Hundreds	Tens	Ones
_____	_____	_____	
	_____	_____	
		_____	

6,237 = _____ + _____ + _____ + _____

BUILD THE CONCEPT



1,429 = _____ thousand + _____ hundreds + _____ tens + _____ ones

1,429 = _____ + _____ + _____ + _____

TRY IT TOGETHER

Write each number in expanded notation.

4

Thousands	Hundreds	Tens	Ones
_____	_____	_____	

8,814 = _____ + _____ + _____ + _____

5

Thousands	Hundreds	Tens	Ones
_____	_____	_____	

309 = _____ + _____

6 1,698 = _____ + _____ + _____ + _____

7 340 = _____ + _____

WORK ON YOUR OWN

Write a Whole Number in Expanded Notation

HOW TO

Using Symbols

1. 2 4 8

↓ ↓ ↓

2 hundreds 4 tens 8 ones

200 40 8

Using Words

Identify the place value of each digit in the number. Then find the value of each digit.

2. 248 = 200 + 40 + 8

Write the number as the sum of the values of its digits. If a digit is 0, it is not in the sum.

New Vocabulary
period

Writing Whole Numbers Using Words

Name _____ Class _____ Date _____

GET STARTED

1. 701 place: _____ value: _____

2. 37 place: _____ value: _____

3. 56,748

Thousands Period			Ones Period		
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

4. 56,748 _____, _____

5. 124,032 _____, _____

BUILD THE CONCEPT

Standard Form	2,315
Word Form	_____ thousand, three hundred _____
Expanded Form	2,000 + _____ + _____ + _____

TRY IT TOGETHER

Write each number using words.

6. 32,179 _____

7. 403 _____

8. 2,008 _____

9. 700,000 _____

WORK ON YOUR OWN

HOW TO

Write Whole Numbers Using Words

Using Symbols	Using Words
1. 43,015 forty-three thousand,	Write words for the number of thousands. Write the word *thousand* and a comma.
2. 43,015 fifteen 43,015 written in words is *forty-three thousand, fifteen.*	Write words for the number of ones. If there are no ones, do not write anything.

Writing Whole Numbers Using Digits

Name _____ Class _____ Date _____

GET STARTED

1. 29,705 _____

2. 350,062 _____

3. four hundred forty-six thousand, eighteen

Thousands Period			Ones Period		
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

4. two thousand, seven hundred eighty _____

5. eighty-nine thousand, two _____

BUILD THE CONCEPT

Expanded Form	5,000 + 600 + 10 + 2
Word Form	_____ thousand, six _____ twelve
Standard Form	_____

TRY IT TOGETHER

Write each number using digits.

6. one thousand, three hundred forty-seven _____

7. twelve thousand, one hundred twenty-nine _____

8. six hundred eighty thousand, one _____

9. fifty thousand, nine hundred twenty-two _____

WORK ON YOUR OWN

HOW TO

Write a Whole Number Using Digits

Using Symbols	Using Words
1. one hundred ninety-seven thousand, fifty-nine 197,	Write the digit(s) for the words left of the word *thousand*. Write a comma to the right of the digit(s).
2. one hundred ninety-seven thousand, fifty-nine 197,059	Write the digit(s) for the words in the ones period. If there are no words to the right of the word *thousand*, write 3 zeros.

New Vocabulary
compare
order
inequality symbols

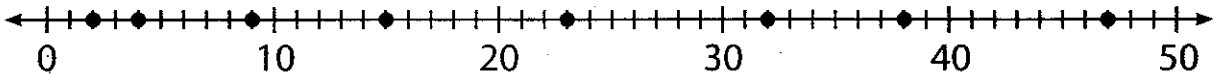
Using a Number Line

Name _____ Class _____ Date _____

GET STARTED

1. 23 _____ tens _____ ones

2. 25 _____ tens _____ ones



3. 2 is to the _____ of 4.
   2 is _____ than 4.
   2 4

4. 9 is to the _____ of 4.
   9 is _____ than 4.
   9 4

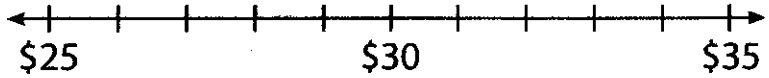
5. 23 is _____ than 38.
   23 38

6. 47 is _____ than 38.
   47 38

7. 32, 15, 38, 23 least to greatest: _____, _____, _____, _____
   greatest to least: _____, _____, _____, _____

BUILD THE CONCEPT

George bought a red shirt for $27, a green shirt for $34, and a blue shirt for $31. Compare the prices using the number line.

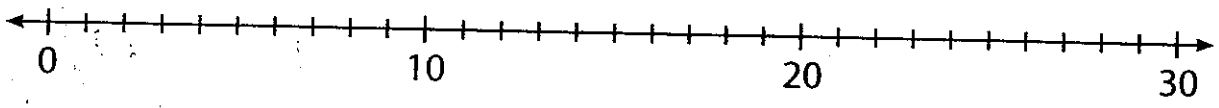


The _____ shirt cost the greatest amount.

The _____ shirt cost the least amount.

TRY IT TOGETHER

Use the number line to compare and order each set of numbers.



8 26 is _____ than 7.

26 7

9 19 is _____ than 24.

19 24

10 24, 26, 7, 19 least to greatest: _____, _____, _____, _____

greatest to least: _____, _____, _____, _____

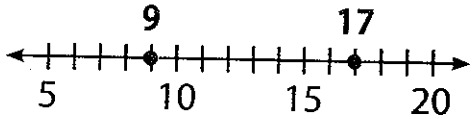
WORK ON YOUR OWN

Use a Number Line to Compare and Order Whole Numbers

HOW TO

Using Symbols

1.



$9 < 17$

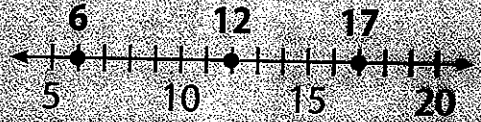
$17 > 9$

Using Words

The number on the left is less than the number on the right.

The number on the right is greater than the number on the left.

2.



least to greatest: →

6, 12, 17

greatest to least: ←

17, 12, 6

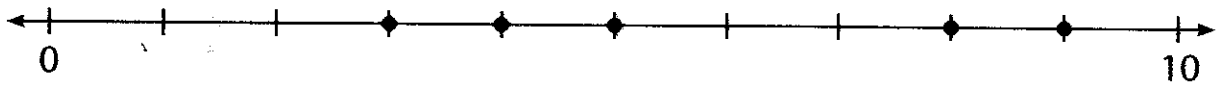
To order three or more numbers from least to greatest, write the numbers as they appear on a number line from left to right.

To order three or more numbers from greatest to least, write the numbers as they appear on a number line from right to left.

Comparing Whole Numbers

Name _____ Class _____ Date _____

GET STARTED



1. 3 ___ 5

2. 8 ___ 4

3. 9 ___ 9

4. 7,820 ___ 7,550

Thousands	Hundreds	Tens	Ones

5. 485 ___ 4,367

Thousands	Hundreds	Tens	Ones

6. 3,516 ___ 3,516

Thousands	Hundreds	Tens	Ones

BUILD THE CONCEPT

Compare 240 and 280.

240 ___ 280

TRY IT TOGETHER

Compare each pair of numbers. Write >, <, or =.

7. 6,340 ___ 6,352

8. 1,348 ___ 987

9. 5,942 ___ 5,902

WORK ON YOUR OWN

HOW TO

Compare Whole Numbers

Using Symbols

1. Compare 2,734 and 2,743.

   2,734
   2,743

2. 2,734
   2,743
   3 < 4
   So, 2,734 < 2,743.

Using Words

Write the numbers on top of each other so the digits in the same place value line up.

If the numbers have different numbers of digits, the number with the digit in the greatest place value is the greater number.

If the numbers have the same number of digits, find the greatest place value where the digits are different. The number with the greatest digit in this place value is the greater number.

Ordering Whole Numbers

Name _____ Class _____ Date _____

GET STARTED

1. 4,645 4,580

2. 257 2,579

3. 9,014; 9,401; 9,104

_____; _____; _____

↑ least ↑ greatest

9	0	1	4
9	4	0	1
9	1	0	4

4. 797; 7,811; 7,912; 701

_____; _____; _____; _____

↑ greatest ↑ least

BUILD THE CONCEPT

Shenice has 7,349 points. Erin has 7,498 points. Sarah has 6,815 points.

Complete the place value chart. Compare and order the scores from least to greatest.

	Thousands	Hundreds	Tens	Ones
Shenice				
Erin				
Sarah				

Who has the least number of points? _____

Who has the greatest number of points? _____

Order the scores from least to greatest. _____; _____; _____

TRY IT TOGETHER

Order from least to greatest.

5 9,847; 546; 841

_____
_____
_____
_____; _____; _____

Order from greatest to least.

6 5,473; 6,845; 567

_____
_____
_____
_____; _____; _____

WORK ON YOUR OWN

HOW TO

Order Whole Numbers

Using Symbols

1. Order from greatest to least.

53; 284; 148

53
284
148

2. (53) ← **least**
284
148

3. (284) ← **greatest**
148

2 > 1

greatest to least:
284; 148; 53

Using Words

Write the numbers one under the other. Line up digits with the same place value.

If the numbers have different numbers of digits, the number with the digit in the greatest place value is the greater number.

If the numbers have the same number of digits, find the greatest place value where the digits are different. The number with the greater digit in this place value is the greater number.

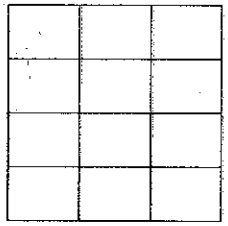
Problem-Solving: Using Logical Reasoning

Name _____ Class _____ Date _____

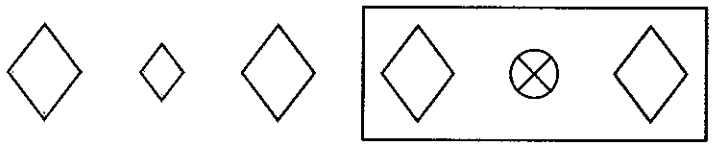
GET STARTED

1. 826; 852; 662; 786

   _____; _____; _____; _____



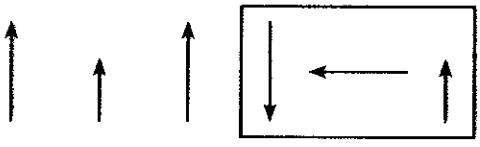
2. Look at this set of objects.



3. If $2 < 8$ and $8 < 9$, then which is true?

$2 > 8$	$9 < 8$	$2 < 9$

4. Look at this set of objects.



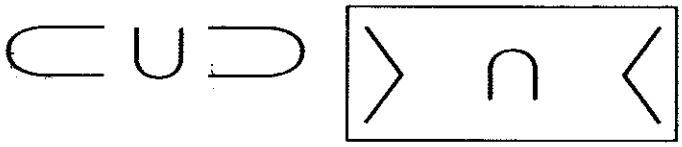
5. Look at this set of objects.

S s S s | S T s

TRY IT TOGETHER

Use logical reasoning to solve each problem.

6 Circle the object that belongs in this set.



7 Circle the object that does **not** belong in this set.

5 8 3 B 7 2

WORK ON YOUR OWN

HOW TO

Solve Problems Using Logical Reasoning

Which shape does **not** belong?

A B C D

1. **Find:** which shape does not belong
2. **How?** Identify how the objects or facts in the set are related.
3. **Solve.** Shapes A, B, and D have four sides. They are rectangles.

   Shape C does not belong.
4. **Is the answer reasonable? Explain.** Yes, Shape C has three sides. It is a triangle, not a rectangle.

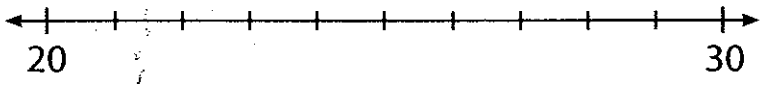
Rounding Whole Numbers

Name _____ Class _____ Date _____

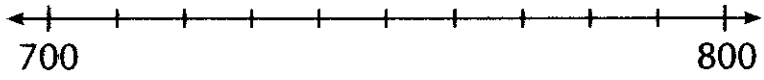
GET STARTED

1. 645 _____ hundreds _____ tens _____ ones

2. 24 24 rounded to the nearest ten is _____.



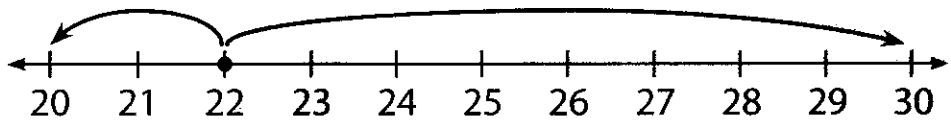
3. 784 784 rounded to the nearest hundred is _____.



4. 532 532 rounded to the nearest hundred is _____.

BUILD THE CONCEPT

The length of a fish Jan caught is 22 inches. What is the length of Jan's fish rounded to the nearest ten?



What ten is to the left of 22? _____
What ten is to the right of 22? _____
Which ten is closer to 22? _____
What is 22 rounded to the nearest ten? _____

So, Jan's fish is about _____ inches.

TRY IT TOGETHER

Round each number to the nearest ten.

5 97 _____

6 63 _____

Round each number to the nearest hundred.

7 375 _____

8 515 _____

WORK ON YOUR OWN

HOW TO

Round Whole Numbers

Using Symbols	Using Words
1. Round 357 to the nearest hundred. 3<u>5</u>7	Identify and underline the digit in the place to be rounded.
2. 3<u>5</u>7 ↑	Circle the digit to the right of the underlined digit.
3. 357 **5** = 5 So, 357 rounded to the nearest hundred is 400.	If the digit to the right is greater than or equal to 5, round the digit up one number and write 0s for the digits after it. If the digit to the right is less than 5, keep the digit being rounded the same and write 0s for the digits after it.

Problem-Solving: Finding Patterns

Name _____ Class _____ Date _____

GET STARTED

1. 24, 21, 18, 15, _____

2. 0, 2, 4, 6, 8, _____

3. Shari and Tina played a game. Shari played the first four turns. She jumped on the trampoline like this: 2 jumps, 4 jumps, 6 jumps, 8 jumps. Tina continued the pattern. How many times did Tina jump?

   a. **Find:** _____

   b. **How?** _____

   c. **Solve.** 2, _____, _____, _____, _____
   Rule: _____
   Tina jumped _____ times.

   d. **Is the answer reasonable? Explain.** _____
   _____

4. How many times did Tina jump next? _____ times

5. Manuel stacks soup cans in a grocery store display. He stacks 1 can in the first row, 3 cans in the second row, 5 cans in the third row, and 7 cans in the fourth row. If Manuel continues this pattern, how many cans will he stack in the fifth row?

   a. **Find:** _____

   b. **How?** _____

   c. **Solve.** 1, _____, _____, _____, _____
   Rule: _____
   There are _____ cans in the fifth row.

   d. **Is the answer reasonable? Explain.** _____
   _____

6. How many cans will be in the sixth row? _____ cans