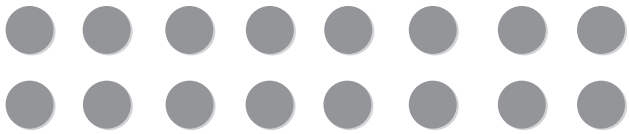
Name _____

Divide by 2

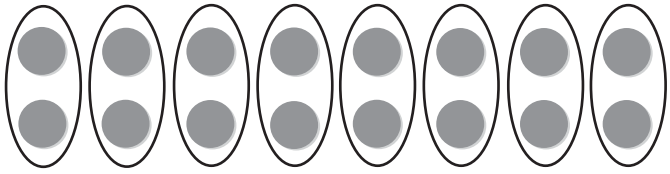
You can draw a picture to show how to divide.

Find the quotient. 16 ÷ 2

Step 1 Draw 16 counters.



Step 2 Circle groups of 2. Continue circling groups of 2 until all 16 counters are in groups.

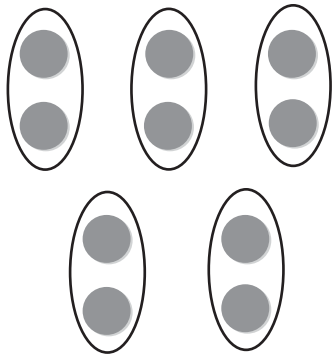


There are **8** groups of **2**.
So, 16 ÷ 2 = **8**.

Write a division equation for the picture.

1.

2.



_____ _____

Name _____

Division Maze

Begin at START and find your way through the maze. Follow only numbers that can be divided by 2 with none left over. End at FINISH.

START 2	67	40	13	17	67	9
13	10	71	22	33	91	19
49	11	49	17	66	81	93
101	23	39	311	47	16	113
53	1	51	3	46	31	21
24 **FINISH**	42	12	38	7	1	19

1. Write Math How did you know which number to go to next after the digit 2 in the START space? **Explain.**

_____

_____

2. **Stretch Your Thinking** How many numbers from 1 through 100 can be divided by 2 with none left over? Are the numbers *even* or *odd*?

_____

Divide by 10

You can use a multiplication table to divide by 10.

×	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Find the quotient. 30 ÷ 10

Think of a related multiplication fact.

10 × ■ = 30

Step 1 Find the row for the factor, 10. This number is the divisor in the division problem.

Step 2 Look across the row to find the product, 30. This number is the dividend in the division problem.

Step 3 Look up to the top row to find the unknown factor, **3**. This is the quotient in the division problem.

Since 10 × **3** = 30, then 30 ÷ 10 = **3**.

So, 30 ÷ 10 = **3**.

Find the unknown factor and quotient.

1. 10 × _____ = 70 _____ = 70 ÷ 10

2. 10 × _____ = 20 20 ÷ 10 = _____

Find the quotient.

3. 60 ÷ 10 = _____

4. 80 ÷ 10 = _____

5. 100 ÷ 10 = _____

6. $10\overline{)50}$

7. $10\overline{)90}$

8. $10\overline{)30}$

Name _____

Olympics Math

A decade is equal to 10 years.

Use the table for 1–3.

Summer Olympics	
Year	**Location**
1996	Atlanta, United States
2000	Sydney, Australia
2004	Athens, Greece
2008	Beijing, China
2012	London, Great Britain

1. The 1992 Summer Olympics were held in Barcelona, Spain. How many decades later were the Summer Olympics held in London, Great Britain?

_____

2. The 1960 Summer Olympics were held in Rome, Italy. How many decades later were the Summer Olympics held in Sydney, Australia?

_____

3. The Summer Olympics were held in St. Louis 92 years before the Summer Olympics were held in Atlanta. In what year were the Olympics held in St. Louis?

_____

4. The 1932 Summer Olympics were held in Los Angeles. Seven decades later the Winter Olympics were held in Salt Lake City. In what year were the Winter Olympics held in Salt Lake City?

_____

5. Write Math Harrison was born in 2003. How many decades old will he be in 2023? **Explain** how you found your answer.

_____

_____

6. Stretch Your Thinking Look at the Summer Olympics table above. After the 2012 Olympics, what year will be the next time the Summer Olympics are held? **Explain.**

_____

_____

Name _____

Divide by 5

You can use a hundred chart and count up to help you divide.

Find the quotient. 30 ÷ 5

Step 1 Count up by 5s until you reach 30. Circle the numbers you say in the count.

Step 2 Count the number of times you count up.

5, 10, 15, _____, _____, _____

1 2, _____, _____, _____, _____

Step 3 Use the number of times you count up to complete the equation.

You counted up by 5 _____ times.

So, 30 ÷ 5 = _____.

1	2	3	4	(5)	6	7	8	9	(10)
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Use the hundred chart and count up to solve.

1. 20 ÷ 5 = _____

2. 35 ÷ 5 = _____

3. 40 ÷ 5 = _____

Find the quotient.

4. 25 ÷ 5 = _____

5. _____ = 45 ÷ 5

6. 10 ÷ 5 = _____

7. _____ = 15 ÷ 5

8. 50 ÷ 5 = _____

9. _____ = 5 ÷ 5

Name _____

Guess My Number

Read the clues. Use all the clues to guess the number.

1. I am a 1-digit number. I am not even. If you multiply me by 10, then divide the answer by 5, the quotient is 6. What number am I?

_____

2. If you divide me by 2 and then multiply the answer by 10, you get a product of 20. What number am I?

_____

3. If you multiply me by 2, then divide the answer by 2, then divide again by 2, you get a quotient of 5. What number am I?

_____

4. I am a 2-digit number. If you divide me by 5 then multiply by 2, the product is 20. What number am I?

_____

5. I am the number of tiles in a tile design. Each tile in the design has 5 sides. There are 40 sides on the tiles in all. What number am I?

_____

6. I am the number of red tiles in a design with red and blue tiles. The red tiles each have 3 sides. The blue tiles each have 5 sides. There are 3 blue tiles. There are 30 sides on the tiles in all. What number am I?

_____

7. Write Math Write a problem like the ones on this page. Include multiplication and division in your clues. Exchange your problem with a partner and solve.

_____

_____

_____

Name _____

Divide by 3

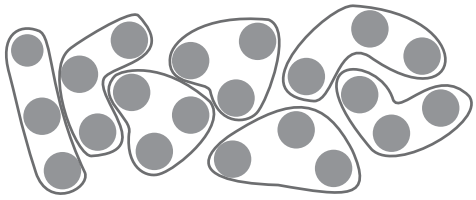
You can draw a picture to show how to divide.

Find the quotient.

21 ÷ 3

Step 1 Draw 21 counters to show the dividend.

Step 2 Circle groups of 3 to show the divisor.



Step 3 Count the groups.

There are 7 groups of 3. So, the quotient is 7.

You can use a related multiplication fact to check your answer.

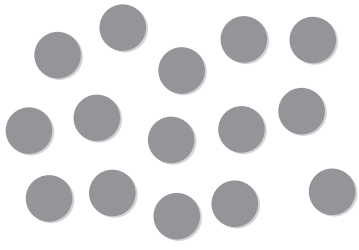
Think: 7 × 3 = 21

So, 21 ÷ 3 = **7**.

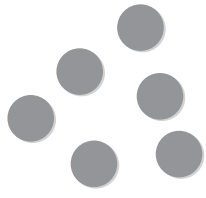
Circle groups of 3 to find the quotient.

1. 9 ÷ 3 = ____

2. 15 ÷ 3 = ____



3. ____ = 6 ÷ 3



Find the quotient.

4. 12 ÷ 3 = ____ **5.** 18 ÷ 3 = ____ **6.** 24 ÷ 3 = ____ **7.** 27 ÷ 3 = ____

Name _____

Three's Teams

The community center is organizing three teams for each of the sports they offer. The number of people on each of the 3 teams for each sport is listed below. Tell how many players have signed up for each sport in all. Then tell how you could organize the teams so each one has the same number of players.

1. Tennis: 2, 4, 3

_____

_____

2. Golf: 2, 4, 6

_____

_____

3. Soccer: 8, 10, 9

_____

_____

4. Baseball: 9, 7, 8

_____

_____

5. Write Math The 3 teams for basketball had 5 people, 7 people, and 9 people. How many people will be on the 3 equal teams for basketball? **Explain.**

_____

_____

_____

6. **Stretch Your Thinking** The 3 teams for football had 15, 12, and 27 people. How many people will be on 3 equal teams for football? **Explain** how you found your answer.

_____

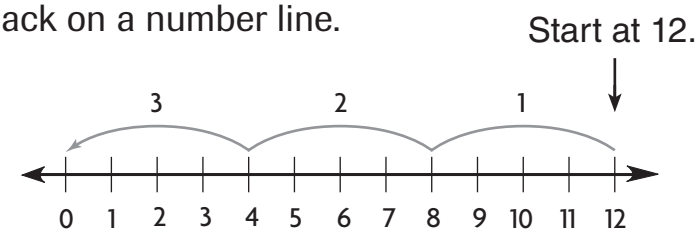
_____

_____

Divide by 4

One way to divide is to count back on a number line.

Find the quotient.
12 ÷ 4

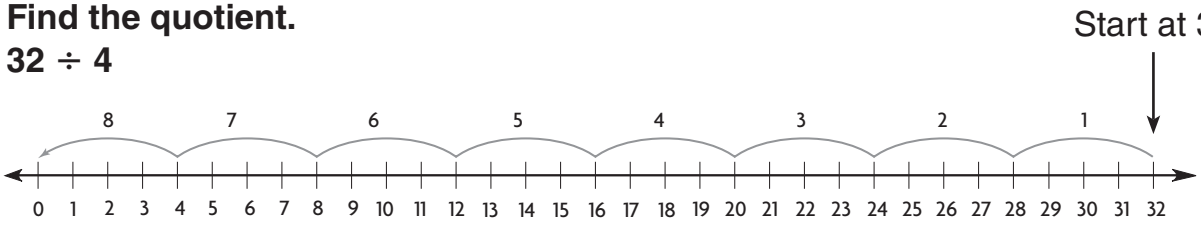


Count back by 4s as many times as you can until you reach 0.

Count the number of times you jumped back 4. **3 times**

So, 12 ÷ 4 = 3.

Find the quotient.
32 ÷ 4



Count back by 4s as many times as you can until you reach 0.

Count the number of times you jumped back 4. **8 times**

So, 32 ÷ 4 = 8.

Find the quotient.

1. 24 ÷ 4 = ____ **2.** ____ = 12 ÷ 3 **3.** 16 ÷ 4 = ____ **4.** ____ = 8 ÷ 4

5. 4 ÷ 2 = ____ **6.** ____ = 28 ÷ 4 **7.** 36 ÷ 4 = ____ **8.** 20 ÷ 4 = ____

Find the unknown number.

9. 4 ÷ 4 = ▲ **10.** 40 ÷ 10 = t **11.** 8 ÷ 2 = g **12.** 21 ÷ 7 = m

▲ = ____ t = ____ g = ____ m = ____

Name _____

Count the Signs

Arial, Brian, and Craig are playing a game. Arial gets a point every time the answer to a problem is =. Brian gets a point every time the answer is <, and Craig gets a point when it is >. Write <, >, or =. Keep track of each player's points.

Arial	Brian	Craig

1. $2 \times 8 \bigcirc 24 \div 4$

2. $36 - 15 \bigcirc 3 \times 7$

3. $16 \div 4 \bigcirc 8 + 5$

4. $2 \times 8 \bigcirc 24 \div 3$

5. $36 \div 4 \bigcirc 1 \times 9$

6. $28 - 15 \bigcirc 30 \div 3$

7. $17 + 8 \bigcirc 6 \times 6$

8. $3 \times 3 \bigcirc 18 \div 2$

9. $28 \div 4 \bigcirc 16 \div 2$

10. $11 + 9 \bigcirc 4 \times 5$

11. $0 + 7 \bigcirc 32 \div 4$

12. $2 \times 7 \bigcirc 12 \div 3$

13. $20 \div 4 \bigcirc 15 \div 3$

14. $27 \div 3 \bigcirc 54 - 45$

15. Write Math Who won the game? **Explain**.

_____

_____

16. Stretch Your Thinking Drew asks if he can play the game. He wants to use the sign ≠ (is not equal to). How many points would Drew get for ≠? **Explain**.

_____

_____

_____

Name _____

Divide by 6

You can use a multiplication table to divide by 6.

Find the quotient. 42 ÷ 6

Think of a related multiplication fact.
6 × ■ = 42

Find the row for the factor, 6.

Look right to find the product, **42**.

Look up to find the unknown factor, 7.

7 is the factor you multiply by 6 to get the product, 42.

So, 6 × **7** = 42.

Use this related multiplication fact to find the quotient.

Since 6 × **7** = 42, then 42 ÷ 6 = **7**.

So, 42 ÷ 6 = **7**.

×	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Find the unknown factor and quotient.

1. 6 × ____ = 30 30 ÷ 6 = ____

2. 6 × ____ = 48 48 ÷ 6 = ____

3. 6 × ____ = 18 18 ÷ 6 = ____

4. 6 × ____ = 24 24 ÷ 6 = ____

Find the quotient.

5. 6 ÷ 6 = ____

6. 42 ÷ 6 = ____

7. 54 ÷ 6 = ____

8. 12 ÷ 6 = ____

9. 0 ÷ 6 = ____

10. 36 ÷ 6 = ____

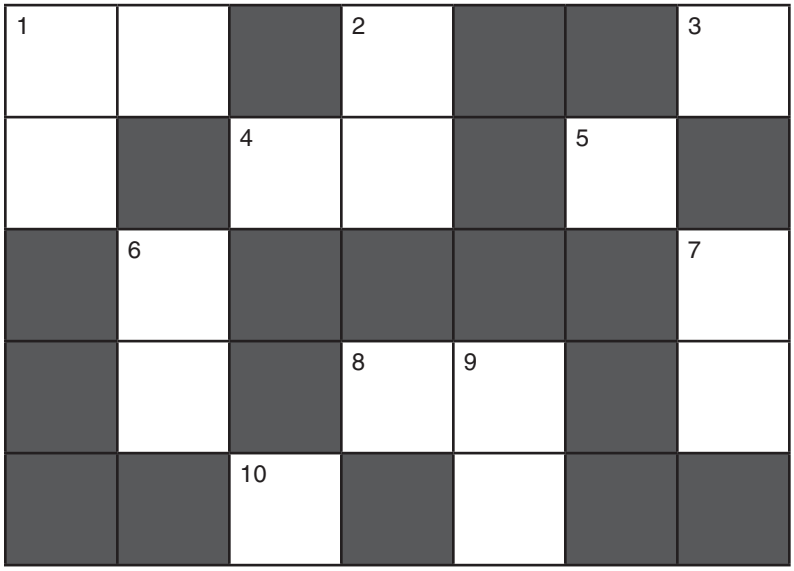
11. 6 ÷ 1 = ____

12. 60 ÷ 6 = ____

Name _____

Division Puzzle

Find the unknown dividends and quotients. Then use your answers to fill in the puzzle.



Across

1. $60 \div 6 =$ _____

2. $6 \div 6 =$ _____

3. $24 \div 6 =$ _____

4. _____ $\div 4 = 12 - 3$

5. $42 \div 6 =$ _____

8. _____ $\div 6 = 9$

10. $12 \div 6 =$ _____

Down

1. _____ $\div 2 = 4 + 5$

2. _____ $\div 4 = 8 \div 2$

4. $18 \div 6 =$ _____

6. _____ $\div 4 = 2 \times 4$

7. _____ $\div 6 = 5$

9. _____ $\div 6 = 8$

11. Write Math How did you find the dividend for 9 Down?

_____

_____

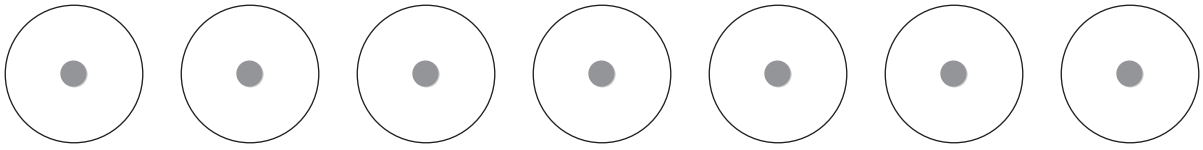
Name _____

Divide by 7

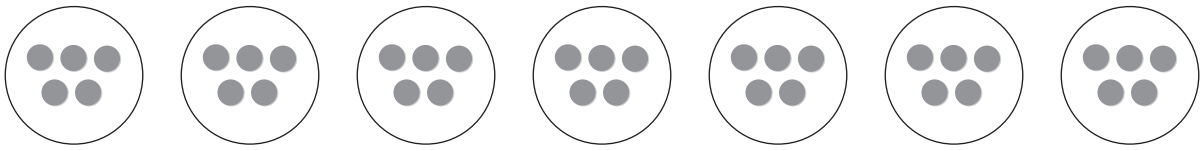
You can use counters to divide by 7.

Find the quotient. 35 ÷ 7

Step 1 Draw 7 circles to show 7 groups. Place 1 counter in each group.



Step 2 Continue placing 1 counter at a time in each group until all 35 counters are placed.



There are **5** counters in each group.

So, 35 ÷ 7 = **5**.

Find the unknown factor and quotient.

1. 7 × ____ = 63 63 ÷ 7 = ____

2. 7 × ____ = 7 7 ÷ 7 = ____

3. 7 × ____ = 14 14 ÷ 7 = ____

4. 7 × ____ = 28 28 ÷ 7 = ____

Find the quotient.

5. ____ = 56 ÷ 7

6. 21 ÷ 7 = ____

7. 42 ÷ 7 = ____

8. 28 ÷ 7 = ____

9. ____ = 35 ÷ 7

10. 63 ÷ 7 = ____

11. 49 ÷ 7 = ____

12. 70 ÷ 7 = ____

Name _____

Monster Ball

The monsters at the ball had different numbers of feet. Here is a list of the different monsters at the ball.

biped	triped	quadruped	pentaped	hexaped	septaped
2 feet	3 feet	4 feet	5 feet	6 feet	7 feet

1. A group of quadrupeds were standing together. There were a total of 20 feet. How many quadrupeds were in the group?

_____

2. A group of septapeds were standing together. There were a total of 42 feet. How many septapeds were in the group?

_____

3. There were 2 hexapeds and 4 tripeds dancing. How many feet were dancing?

_____

4. A group of septapeds and 3 bipeds were dancing. There were a total of 41 feet. How many septapeds were in the group?

_____

5. Write Math Write and solve a word problem about the monsters at the ball.

_____

_____

_____

6. **Stretch Your Thinking** A group of bipeds and pentapeds were standing together. There were a total of 33 feet. How many bipeds and pentapeds can be standing in the group? **Explain.**

_____

_____

_____

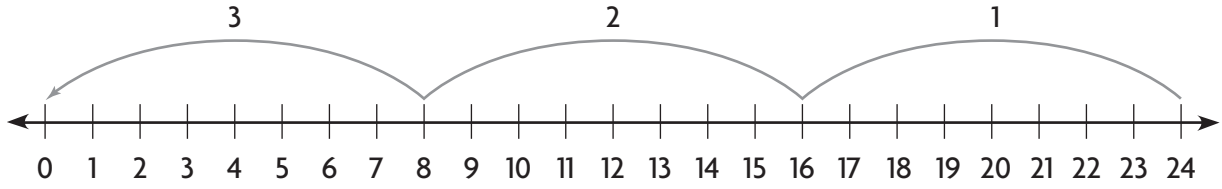
Name _____

Divide by 8

You can use a number line to divide by 8.

Find the quotient. 24 ÷ 8

Step 1 Start at 24. Count back by 8s as many times as you can until you reach 0. Draw the jumps on the number line.



Step 2 Count the number of times you jumped back 8.

You jumped back by 8 **three** times.

So, 24 ÷ 8 = **3**.

Find the unknown factor and quotient.

1. ____ × 8 = 72 72 ÷ 8 = ____

2. 8 × ____ = 48 48 ÷ 8 = ____

3. 8 × ____ = 40 40 ÷ 8 = ____

4. ____ × 8 = 16 16 ÷ 8 = ____

Find the quotient.

5. 32 ÷ 8 = ____

6. ____ = 8 ÷ 8

7. 64 ÷ 8 = ____

8. 56 ÷ 8 = ____

9. ____ = 0 ÷ 8

10. 80 ÷ 8 = ____

11. 24 ÷ 8 = ____

12. ____ = 72 ÷ 8

13. ____ = 48 ÷ 8

Name _____

Space Weight

Weight is the measure of how heavy an object is. The weight of an object on Earth is about 8 times as great as that object's weight on Callisto, a moon of Jupiter. For each object below, write a division equation to find the weight on Callisto.

1. A 16-pound cat

_____

2. A 56-pound dog

_____

3. A 40-pound suitcase

_____

4. A 48-pound child

_____

5. An 80-pound machine

_____

6. A 160-pound man

_____

7. Write Math The weight of an object on Earth is about 6 times as great as the object's weight on Earth's moon. What is the weight of an object on Earth's moon if it weighs 42 pounds on Earth? **Explain.**

_____

_____

_____

8. Stretch Your Thinking An object would weigh 6 pounds on Callisto. What would it weigh on Earth's moon? **Explain.**

_____

_____

_____

Name _____

Divide by 9

You can use repeated subtraction to divide by 9.

Find the quotient.
36 ÷ 9

Step 1 Start with 36. Subtract 9 as many times as you can until you reach 0. Write the answers.

Step 2 Count the number of times you subtract 9.

You subtracted 9 **four** times.

So, 36 ÷ 9 = **4**.

Find the quotient.

1. 9 ÷ 9 = ____

2. 27 ÷ 9 = ____

3. 18 ÷ 9 = ____

4. 36 ÷ 9 = ____

5. ____ = 72 ÷ 9

6. ____ = 63 ÷ 9

7. 45 ÷ 9 = ____

8. ____ = 18 ÷ 9

9. ____ = 54 ÷ 9

10. $9\overline{)63}$

11. $9\overline{)81}$

12. $9\overline{)36}$

13. $8\overline{)48}$

14. $4\overline{)36}$

15. $7\overline{)28}$

Name _____

Left Overs

Complete the table.

	Counters	How many in each group?	How many equal groups?	How many left over?
1.	14	4		
2.	15	4		
3.	16	4		
4.	45	8		
5.	46	8		
6.	26	7		
7.	27	7		
8.	25	9		
9.	26	9		

10. Write Math What are all the possible remainders (number left over) when you divide a number by 9? **Explain**.

_____

_____

_____

11. **Stretch Your Thinking** You divide a number and get a remainder of 4. What 1-digit number can be the divisor of the problem? **Explain**.

_____

_____

_____

Name _____

Problem Solving • Two-Step Problems

Chloe bought 5 sets of books. Each set had the same number of books. She donated 9 books to her school. Now she has 26 books left. How many books were in each set that Chloe bought?

Read the Problem	Solve the Problem
What do I need to find? I need to find how many books were in each set.	First, begin with the number of books left. Add the number of books donated. books left ↓ 26 + books donated ↓ 9 = t, total number of books ↓ t 35 = t Then divide to find the number of books in each set. t, total number of books ↓ 35 ÷ sets of books ↓ 5 = s, books in each set ↓ s 7 = s So, 7 books were in each set.
What information do I need to use? I need to use the information given: Chloe bought 5 sets of books. She donated 9 books. She has 26 books left.	
How will I use the information? I will use the information to act out the problem.	

Solve the problem.

1. Jackie had 6 equal packs of pencils. Her friend gave her 4 more pencils. Now she has 52 pencils. How many pencils were in each pack?

_____

2. Tony had 4 equal sets of sports cards. He gave his friends 5 cards. Now he has 31 cards. How many cards were in each set?

_____

Name _____

Division Steps

Solve. Show your steps to find the answer.

1. Veronica bought a pack of 50 CDs. She gave 8 to her friend, Leslie. Then she made 6 equal sets of CDs. How many CDs are in each set?

_____

_____

2. Sid has 2 boxes of markers with the same number of markers in each box. He gives 3 markers to his sister. Now Sid has 13 markers. How many markers were in each box?

_____

_____

3. Casey bought 30 basketball trading cards. He gave 6 to his sister and then put the rest in an album. If 6 cards fit on one page of the album, how many pages did Casey use?

_____

_____

4. Barron bought a 25-pound bag of dog food. He still had 3 pounds from an older bag. If he feeds his dogs 4 pounds of food each week, how many weeks until all the dog food is gone?

_____

_____

5. Manny ordered 16 skateboard wheels. If he sold 4 wheels to Brad, how many skateboards can he put wheels on if each board uses 4 wheels?

_____

_____

6. Kiera has 27 balls of yarn. Her mother gave her 5 more balls. If she makes scarves that use 4 balls each, how many scarves can she make?

_____

_____

7. Write Math Thomas starts with 36 photos and throws away 6 that are too dark. Then he organizes the rest of them on scrapbook pages so that there are 5 photos on each page. How many pages will he use? Draw to **explain.**

_____

Name _____

Order of Operations

Danny buys a marker for $4. He also buys 5 pens for $2 each. How much money does he spend?

You can write $\$4 + 5 \times \$2 = c$ to describe and solve the problem.

Find $\$4 + 5 \times \$2 = c$.

When there is more than one type of operation in a problem, use the **order of operations**, or the set of rules for the order in which to do operations.

Order of Operations

First: Multiply and divide from left to right.

Then: Add and subtract from left to right.

Step 1 Multiply from left to right.

$\$4 + \underbrace{5 \times \$2}_{\text{multiply}} = c$

$\$4 + \$10 = c$

Step 2 Next, add from left to right.

$\underbrace{\$4 + \$10}_{\text{add}} = c$

$\$14 = c$

So, Danny spends $14 .

Write *correct* if the operations are listed in the correct order. If not correct, write the correct order of operations.

1. $5 + 6 \times 3$ add, multiply

_____

2. $20 \div 4 - 3$ divide, subtract

_____

Follow the order of operations to find the unknown number.

3. $9 - 7 + 2 = k$

$k =$ ____

4. $8 + 2 \times 5 = m$

$m =$ ____

5. $7 \times 8 - 6 = g$

$g =$ ____

6. $16 + 4 \div 2 = s$

$s =$ ____

7. $12 - 6 \div 2 = y$

$y =$ ____

8. $36 \div 6 + 13 = f$

$f =$ ____

Name _____

Order of Operations

Find the unknown number that makes the equation true. Follow the order of operations.

1. $2 + 3 \times \square = 20$

_____

2. $12 \div \square - 2 = 2$

_____

3. $4 \times 6 - \square = 12$

_____

4. $\square + 6 \times 3 = 20$

_____

5. $5 + \square \div 6 = 8$

_____

6. $20 - \square \div 8 = 18$

_____

7. $14 - 2 \times \square = 0$

_____

8. $30 \div 6 \times \square = 45$

_____

9. $9 \times \square - 20 = 16$

_____

10. $\square + 2 \times 5 = 45$

_____

11. $\square + 24 \div 4 = 7$

_____

12. $9 + 7 - \square = 11$

_____

7. Write Math **Explain** how you found the unknown number in Exercise 9.

_____

_____

_____

_____