

Name _____



Week 8 Homework
Due Monday 10/7/19

Another Look!



To estimate, round 3-digit numbers to the nearest hundred and round 4-digit numbers to the nearest thousand.

Homework & Practice 3-2

Mental Math: Round to Estimate Products

Use rounding to estimate 7×215 .

First, round 215 to the nearest hundred.
215 rounds to 200.

Then, multiply.
 $7 \times 200 = 1,400$

So, 7×215 is about 1,400.

Check if $2,885 \times 4 = 11,540$ is reasonable.

First round 2,885 to the nearest thousand.
2,885 rounds to 3,000.

Then, multiply.
 $3,000 \times 4 = 12,000$

So, $2,885 \times 4$ is about 12,000.

11,540 is a reasonable answer.

For 1-6, estimate the product.

1. 4×279
↓ Round 279 to _____
 $4 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

2. $9 \times 4,720$
↓ Round 4,720 to _____
 $9 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

3. 8×89
↓ Round 89 to _____
 $8 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

4. 183×4

5. $3 \times 1,675$

6. $8,210 \times 2$

For 7-9, estimate to check if the answer is reasonable.

7. $8 \times 578 = 4,624$
↓ Round 578 to _____
 $8 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
Reasonable Not Reasonable

8. $3 \times 8,230 = 2,469$
↓ Round 8,230 to _____
 $3 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
Reasonable Not Reasonable

9. $7 \times 289 = 2,023$
↓ Round 289 to _____
 $7 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
Reasonable Not Reasonable

10. **AZ Vocabulary** Use *expanded form* or *number name* to complete the definition.

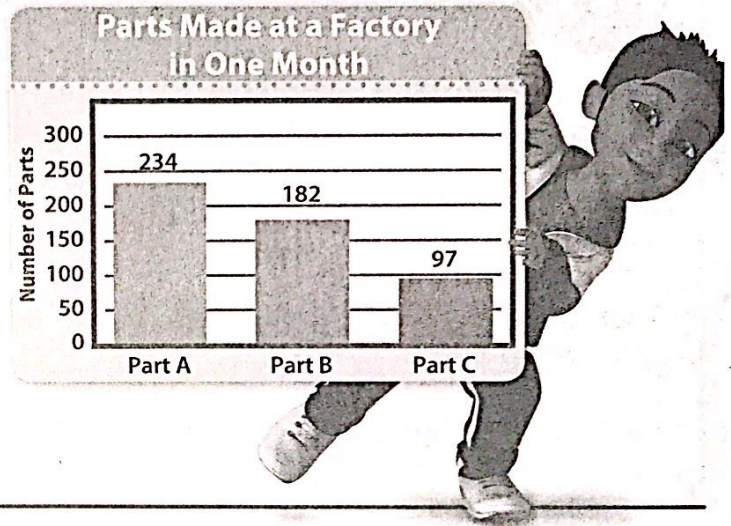
A number written as the sum of the value of its digits is written in _____.

11. **Math and Science** The Ojos del Salado volcano has an elevation about 3 times as great as the Khangar volcano. If the Khangar volcano is 6,562 feet above sea level, what is the approximate elevation of the Ojos del Salado volcano?

For 12–13, use the graph at the right.

12. **Number Sense** Estimate how many of Part B would be made in 3 months.

13. It costs the factory \$4 to make each Part A. About how much does it cost to make Part A each month?



14. **Higher Order Thinking** A Deluxe Package costs \$50 and includes one of each of the individual pictures listed in the table. Estimate about how much money you save with the Deluxe Package instead of buying one of each of the individual pictures. Explain.

Individual Picture Prices	
Picture Size	Price
8 × 10	\$18
5 × 7	\$14
4 × 6	\$10
8 wallets	\$18

Common Core Assessment

15. The distance between Bill's house and his aunt's house is 485 miles. About how many miles would Bill drive if he made 4 round trips from his house to his aunt's house?
- (A) About 5,000 miles
(B) About 4,000 miles
(C) About 3,200 miles
(D) About 2,000 miles
16. Fourth graders chose to have a read-a-thon for one hour. Each of the four fourth-grade classes read 408 pages. About how many pages did all the fourth graders read?
- (A) About 800 pages
(B) About 1,000 pages
(C) About 1,600 pages
(D) About 2,400 pages

Homework & Practice 3-3

The Distributive Property

Another Look!

Hector's rock collection is stored in 7 cases. Each case holds 280 rocks. How many rocks are in Hector's collection?

You can use the Distributive Property to find the product of 7×280 .



- | | | |
|--|------------------|---|
| <p>Step 1 Break apart 280 into $200 + 80$
 $7 \times 280 = 7 \times (200 + 80)$</p> | <p>or</p> | <p>Break apart 280 into $300 - 20$
 $7 \times 280 = 7 \times (300 - 20)$</p> |
| <p>Step 2 Multiply 7 times each part of the sum.
 $(7 \times 200) + (7 \times 80)$
 $1,400 + 560$</p> | <p>or</p> | <p>Multiply 7 times each part of the difference.
 $(7 \times 300) - (7 \times 20)$
 $2,100 - 140$</p> |
| <p>Step 3 Add.
 $1,400 + 560 = 1,960$</p> | <p>or</p> | <p>Subtract.
 $2,100 - 140 = 1,960$</p> |

So, $7 \times 280 = 1,960$.
 Hector has 1,960 rocks in his collection.

For 1-8, use the Distributive Property to find each product.

1. $8 \times 46 = 8 \times (40 + \underline{\quad})$
 $= (8 \times 40) + (\underline{\quad} \times \underline{\quad})$
 $= \underline{\quad} + \underline{\quad}$
 $= \underline{\quad}$

2. $39 \times 5 = 5 \times (\underline{\quad} - 1)$
 $= (5 \times \underline{\quad}) - (5 \times 1)$
 $= \underline{\quad} - \underline{\quad}$
 $= \underline{\quad}$

3. $6 \times 310 = 6 \times (300 + \underline{\quad})$
 $= (6 \times \underline{\quad}) + (\underline{\quad} \times 10)$
 $= \underline{\quad} + \underline{\quad}$
 $= \underline{\quad}$

4. $9 \times 895 = 9 \times (\underline{\quad} - \underline{\quad})$
 $= (9 \times \underline{\quad}) - (\underline{\quad} \times 5)$
 $= \underline{\quad} - \underline{\quad}$
 $= \underline{\quad}$

5. 5×108

6. 2×62

7. $4 \times 1,554$

8. $2 \times 2,568$

9. © **MP.7 Use Structure** Show how to use the Distributive Property to find $7 \times 1,214$.

10. A lodge at a state park has 49 rooms. Up to five people may stay in each room. What is the maximum number of people who can stay at the lodge at one time?

11. Lauren read 36 books during the year. If she reads the same number of books for 6 years in a row, how many total books will Lauren read?

12. A parking garage has 8 levels. Each level has parking spaces for 78 cars. How many cars can park in the garage at one time?

For 13–14, use the table at the right.

13. A banquet room is being set up for a party using round tables. How many chairs are used for the round tables?

14. **Higher Order Thinking** Which of the three table types allows seating for the greatest number of people? Explain.



Hotel Banquet Room Plans		
Type of Table	Number of Tables	Chairs that Fit Around Each
Long Dining Tables	62	8
Round Dining Tables	105	6
Square Dining Tables	150	4

© **Common Core Assessment**

15. Joey's grade has a goal to collect 4,000 cans for the school canned-food drive. There are 486 students in Joey's grade. If each student brings in 8 cans of food, will the class reach its goal? Explain.

Use place value to break apart numbers and the Distributive Property to help multiply.

