

**Chapter**  
**1**

# Multiplication

## Practice 1 Mental Multiplication

**Multiply mentally. Fill in the missing numbers.**

*Example*

Find  $4 \times 7$ .

$4 \times 7$  is the same as  $7 \times 4$ .

So,  $4 \times 7 = \underline{28}$ .

I skip-count in fours.



**1.** Find  $3 \times 9$ .

$3 \times 9$  is the same as  $9 \times 3$ .

So,  $3 \times 9 = \underline{\hspace{2cm}}$ .

**2.** Find  $5 \times 7$ .

$5 \times 7$  is the same as  $7 \times 5$ .

So,  $5 \times 7 = \underline{\hspace{2cm}}$ .

**3.** Find  $9 \times 8$ .

$9 \times 8$  is the same as  $8 \times 9$ .

So,  $9 \times 8 = \underline{\hspace{2cm}}$ .

## Multiply mentally. Fill in the missing numbers.

*Example*

$$\begin{aligned} 3 \times 50 &= 3 \times 5 \text{ tens} \\ &= \underline{15} \text{ tens} \\ &= \underline{150} \end{aligned}$$

$$\begin{aligned} 4. \quad 3 \times 500 &= 3 \times 5 \text{ hundreds} \\ &= \underline{\hspace{2cm}} \text{ hundreds} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} 5. \quad 7 \times 40 &= 7 \times 4 \text{ tens} \\ &= \underline{\hspace{2cm}} \text{ tens} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} 6. \quad 7 \times 400 &= 7 \times 4 \text{ hundreds} \\ &= \underline{\hspace{2cm}} \text{ hundreds} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} 7. \quad 8 \times 60 &= 8 \times 6 \text{ tens} \\ &= \underline{\hspace{2cm}} \text{ tens} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} 8. \quad 8 \times 600 &= 8 \times 6 \text{ hundreds} \\ &= \underline{\hspace{2cm}} \text{ hundreds} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

## Multiply mentally.

$$9. \quad 9 \times 20 = \underline{\hspace{2cm}}$$

$$10. \quad 9 \times 200 = \underline{\hspace{2cm}}$$

$$11. \quad 2 \times 70 = \underline{\hspace{2cm}}$$

$$12. \quad 2 \times 700 = \underline{\hspace{2cm}}$$

$$13. \quad 8 \times 30 = \underline{\hspace{2cm}}$$

$$14. \quad 8 \times 300 = \underline{\hspace{2cm}}$$

## Practice 2 Multiplying Without Regrouping

Fill in the missing numbers.

*Example*

$$2 \times 13 = ?$$

$$2 \times \underline{3} \text{ ones} = \underline{6} \text{ ones}$$

$$2 \times \underline{1} \text{ ten} = \underline{2} \text{ tens}$$

$$\text{So, } 2 \times 13 = \underline{26}.$$

$$\begin{array}{r} 13 \\ \times 2 \\ \hline 26 \end{array}$$

**1.**  $2 \times 342 = ?$

$$2 \times \underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ ones}$$

$$2 \times \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$$

$$2 \times \underline{\hspace{2cm}} \text{ hundreds} = \underline{\hspace{2cm}} \text{ hundreds}$$

$$\text{So, } 2 \times 342 = \underline{\hspace{2cm}}.$$

$$\begin{array}{r} 342 \\ \times 2 \\ \hline \end{array}$$

**2.**  $3 \times 312 = ?$

$3 \times$  \_\_\_\_\_ ones = \_\_\_\_\_ ones

$3 \times$  \_\_\_\_\_ ten = \_\_\_\_\_ tens

$3 \times$  \_\_\_\_\_ hundreds = \_\_\_\_\_ hundreds

So,  $3 \times 312 =$  \_\_\_\_\_.

$$\begin{array}{r} 312 \\ \times 3 \\ \hline \end{array}$$

**3.**  $4 \times 201 = ?$

$4 \times$  \_\_\_\_\_ one = \_\_\_\_\_ ones

$4 \times$  \_\_\_\_\_ tens = \_\_\_\_\_ tens

$4 \times$  \_\_\_\_\_ hundreds = \_\_\_\_\_ hundreds

So,  $4 \times 201 =$  \_\_\_\_\_.

$$\begin{array}{r} 201 \\ \times 4 \\ \hline \end{array}$$

**Multiply.***Example*

$$\begin{array}{r} 414 \\ \times \quad 2 \\ \hline \end{array}$$

8 2 8

**4.**

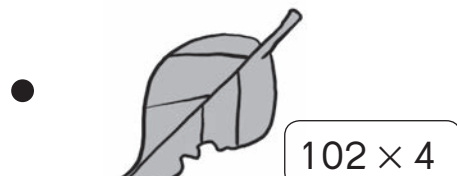
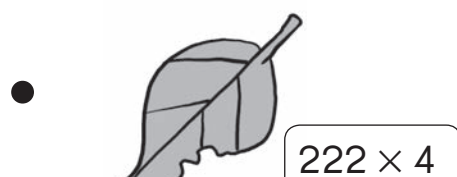
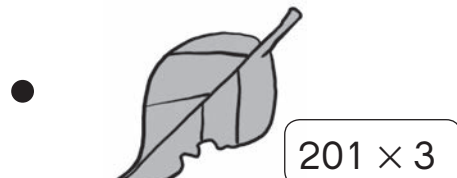
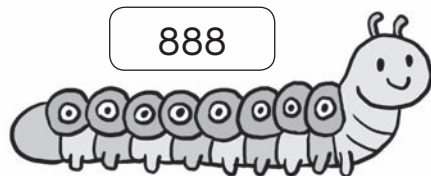
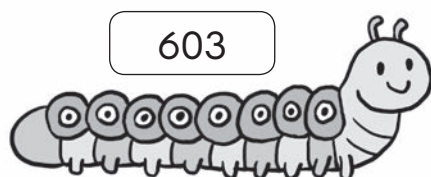
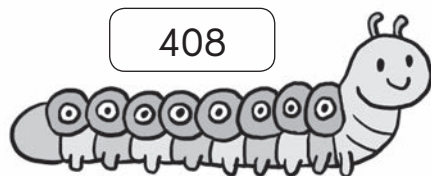
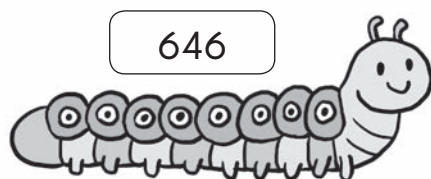
$$\begin{array}{r} 321 \\ \times \quad 3 \\ \hline \end{array}$$

**5.**

$$\begin{array}{r} 102 \\ \times \quad 4 \\ \hline \end{array}$$


**6.**


$$\begin{array}{r} 101 \\ \times \quad 5 \\ \hline \end{array}$$


**Match each caterpillar to its leaf.****7.**


## Multiply and complete.


8. Frederick Frog is hungry.  
He is out hunting for his lunch.  
Clever Frederick Frog eats only non-poisonous flies.  
Flies carrying a product greater than 400 are non-poisonous.  
Which flies should Frederick Frog eat?


**A**   $33 \times 3$


**B**   $214 \times 2$


**C**   $123 \times 3$


**D**   $111 \times 5$

**E**   $144 \times 2$

**F**   $122 \times 4$

**G**   $432 \times 2$

**H**   $222 \times 3$

**I**   $212 \times 4$

Frederick Frog should eat flies \_\_\_\_\_.

**Solve.***Example*

Curtis scores 22 points in a game.

He wants to score the same number of points for every game.

How many points does he hope to score in 4 games?

$$22 \times 4 = 88$$

$$\begin{array}{r} 22 \\ \times 4 \\ \hline 88 \end{array}$$

He hopes to score 88 points in 4 games.

- 9.** 143 people ride the train every hour.  
How many people ride the train in 2 hours?

- 10.** A bakery sells 213 muffins a day.  
How many muffins does it sell in 3 days?

- 11.** A website has 232 hits in the first week.  
In the second week, the website has the same number of hits.  
How many hits does the website have in both weeks?
- 12.** A grocery store sells 202 cartons of milk a week.  
How many cartons of milk does it sell in 4 weeks?



## Practice 3 Multiplying Ones, Tens, and Hundreds with Regrouping

Fill in the missing numbers.

Example

$$3 \times 26 = ?$$

Step 1

Multiply the ones by 3.

$$3 \times \underline{6} \text{ ones} = \underline{18} \text{ ones}$$

Regroup the ones.

$$\underline{18} \text{ ones} = \underline{1} \text{ ten } \underline{8} \text{ ones}$$

Step 2

Multiply the tens by 3.

$$3 \times \underline{2} \text{ tens} = \underline{6} \text{ tens}$$

Add the tens.

$$\underline{1} \text{ ten} + \underline{6} \text{ tens} = \underline{7} \text{ tens}$$

$$\text{So, } 3 \times 26 = \underline{78}.$$

$$\begin{array}{r} \boxed{1} \\ 26 \\ \times 3 \\ \hline \boxed{78} \end{array}$$

## Fill in the missing numbers.

1.  $5 \times 16 = ?$

Step 1

Multiply the ones by 5.

$5 \times \underline{\hspace{2cm}}$  ones =  $\underline{\hspace{2cm}}$  ones

Regroup the ones.

$\underline{\hspace{2cm}}$  ones =  $\underline{\hspace{2cm}}$  tens  $\underline{\hspace{2cm}}$  ones

Step 2

Multiply the tens by 5.

$5 \times \underline{\hspace{2cm}}$  ten =  $\underline{\hspace{2cm}}$  tens

Add the tens.

$\underline{\hspace{2cm}}$  tens +  $\underline{\hspace{2cm}}$  tens =  $\underline{\hspace{2cm}}$  tens

So,  $5 \times 16 = \underline{\hspace{2cm}}$ .

$$\begin{array}{r} \square \\ 16 \\ \times 5 \\ \hline \square \end{array}$$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Fill in the missing numbers.**

2.  $4 \times 82 = ?$

$$\begin{array}{r} 82 \\ \times 4 \\ \hline \end{array}$$

Step 1 Multiply the ones by 4.

$4 \times \underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ ones}$

Step 2 Multiply the tens by 4.

$4 \times \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

Regroup the tens.

$\underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ hundreds } \underline{\hspace{2cm}} \text{ tens}$

So,  $4 \times 82 = \underline{\hspace{2cm}}$ .

### Fill in the missing numbers.

3.  $5 \times 78 = ?$

$$\begin{array}{r} \square \\ 78 \\ \times 5 \\ \hline \square \end{array}$$

Step 1 Multiply the ones by 5.

$5 \times \underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ ones}$

Regroup the ones.

$\underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ tens } \underline{\hspace{2cm}} \text{ ones}$

Step 2 Multiply the tens by 5.

$5 \times \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

Add the tens.

$\underline{\hspace{2cm}} \text{ tens} + \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

Regroup the tens.

$\underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ hundreds } \underline{\hspace{2cm}} \text{ tens}$

So,  $5 \times 78 = \underline{\hspace{2cm}}$ .

**Fill in the missing numbers.**

4.  $4 \times 115 = ?$

**Step 1**

Multiply the ones by 4.

$4 \times \underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ ones}$

Regroup the ones.

$\underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ tens } \underline{\hspace{2cm}} \text{ ones}$

**Step 2**

Multiply the tens by 4.

$4 \times \underline{\hspace{2cm}} \text{ ten} = \underline{\hspace{2cm}} \text{ tens}$

Add the tens.

$\underline{\hspace{2cm}} \text{ tens} + \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

**Step 3**

Multiply the hundreds.

$4 \times \underline{\hspace{2cm}} \text{ hundred} = \underline{\hspace{2cm}} \text{ hundreds}$

So,  $4 \times 115 = \underline{\hspace{2cm}}$ .

1   1   5
×       4

## Fill in the missing numbers.

5.  $4 \times 242 = ?$

Step 1 Multiply the ones by 4.

$4 \times \underline{\hspace{2cm}}$  ones =  $\underline{\hspace{2cm}}$  ones

Step 2 Multiply the tens by 4.

$4 \times \underline{\hspace{2cm}}$  tens =  $\underline{\hspace{2cm}}$  tens

Regroup the tens.

$\underline{\hspace{2cm}}$  tens =  $\underline{\hspace{2cm}}$  hundred  $\underline{\hspace{2cm}}$  tens

Step 3 Multiply the hundreds by 4.

$4 \times \underline{\hspace{2cm}}$  hundreds =  $\underline{\hspace{2cm}}$  hundreds

Add the hundreds.

$\underline{\hspace{2cm}}$  hundred +  $\underline{\hspace{2cm}}$  hundreds

=  $\underline{\hspace{2cm}}$  hundreds

So,  $4 \times 242 = \underline{\hspace{2cm}}$ .

$$\begin{array}{r} \square \\ 242 \\ \times 4 \\ \hline \square \end{array}$$

**Fill in the missing numbers.**

6.  $5 \times 145 = ?$

Step 1

Multiply the ones by 5.

$5 \times \underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ ones}$

Regroup the ones.

$\underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ tens } \underline{\hspace{2cm}} \text{ ones}$

Step 2

Multiply the tens by 5.

$5 \times \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

Add the tens.

$\underline{\hspace{2cm}} \text{ tens} + \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

Regroup the tens.

$\underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ hundreds } \underline{\hspace{2cm}} \text{ tens}$

Step 3

Multiply the hundreds by 5.

$5 \times \underline{\hspace{2cm}} \text{ hundred} = \underline{\hspace{2cm}} \text{ hundreds}$

Add the hundreds.

$\underline{\hspace{2cm}} \text{ hundreds} + \underline{\hspace{2cm}} \text{ hundreds}$

$= \underline{\hspace{2cm}} \text{ hundreds}$

So,  $5 \times 145 = \underline{\hspace{2cm}}$ .

1	4	5
×		5

## Fill in the missing numbers.

7.  $5 \times 159 = ?$

Step 1

Multiply the ones by 5.

$5 \times \underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ ones}$

Regroup the ones.

$\underline{\hspace{2cm}} \text{ ones} = \underline{\hspace{2cm}} \text{ tens } \underline{\hspace{2cm}} \text{ ones}$

Step 2

Multiply the tens by 5.

$5 \times \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

Add the tens.

$\underline{\hspace{2cm}} \text{ tens} + \underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ tens}$

Regroup the tens.

$\underline{\hspace{2cm}} \text{ tens} = \underline{\hspace{2cm}} \text{ hundreds } \underline{\hspace{2cm}} \text{ tens}$

Step 3

Multiply the hundreds by 5.

$5 \times \underline{\hspace{2cm}} \text{ hundred} = \underline{\hspace{2cm}} \text{ hundreds}$

Add the hundreds.

$\underline{\hspace{2cm}} \text{ hundreds} + \underline{\hspace{2cm}} \text{ hundreds}$

$= \underline{\hspace{2cm}} \text{ hundreds}$

So,  $5 \times 159 = \underline{\hspace{2cm}}$ .

1	5 9
×	5

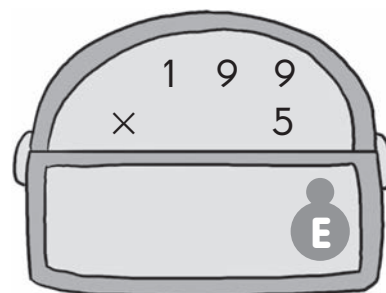
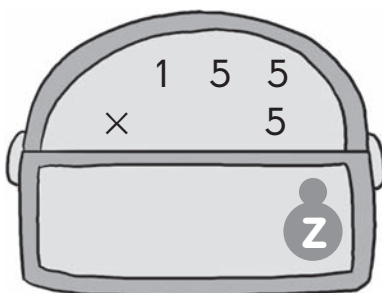
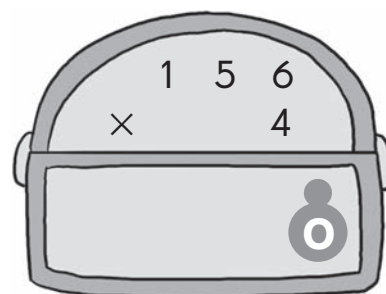
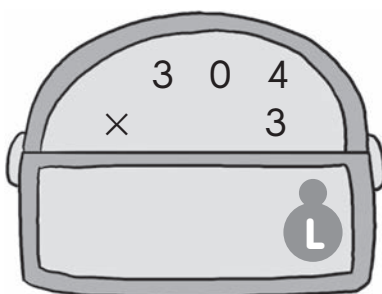
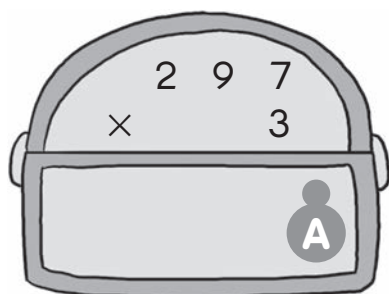
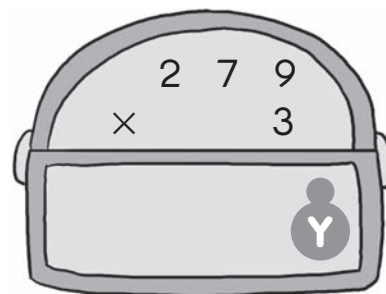
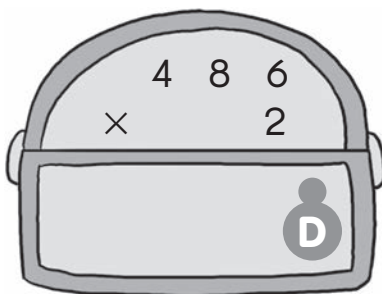
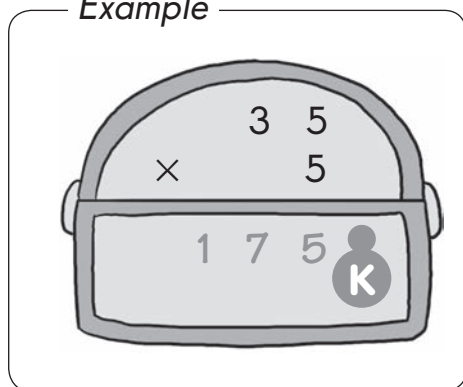


## Practice 4 Multiplying Ones, Tens, and Hundreds with Regrouping

**Multiply and complete.**

*Example*

1.



What key cannot unlock treasure chests?

**Write the letters which match the answers to find out.**

$\underline{\hspace{2cm}}$ 
 $\underline{\hspace{2cm}}$ 
 $\underline{\hspace{2cm}}$ 
 $\underline{\hspace{2cm}}$ 
 $\underline{\hspace{2cm}}$ 
 $\underline{\hspace{2cm}}$

972      624      992      175      995      837

## Solve.

*Example*

Gina reads 84 pages of her book in a day.  
How many pages does Gina read in 5 days?

$$84 \times 5 = 420$$

*Gina reads 420 pages in 5 days.*

- 2.** 187 cars are in a parking lot.  
Each car has 4 wheels.  
How many wheels do the cars have in all?
  
- 3.** 198 students attend a school.  
Each student carries 3 books.  
How many books do they carry in all?
  
- 4.** Jill feeds her pet hamster 5 food pellets each day.  
How many food pellets does she feed her hamster in 165 days?

**Multiply.**

5.  $450 \times 2 =$  \_\_\_\_\_

6.  $232 \times 4 =$  \_\_\_\_\_

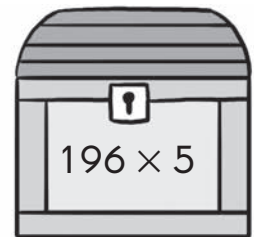
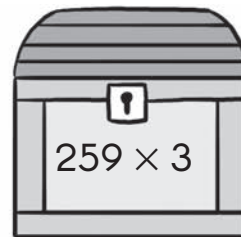
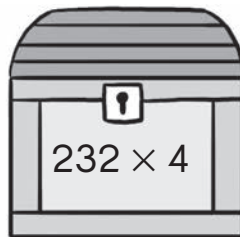
7.  $259 \times 3 =$  \_\_\_\_\_

8.  $196 \times 5 =$  \_\_\_\_\_

**Complete.**

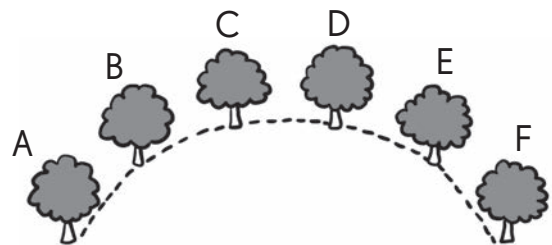
9. Circle the chest with the greatest product.

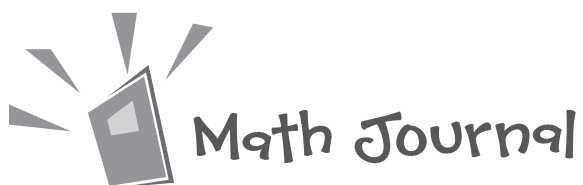
10. Underline the chest with the least product.

**Solve.****Then circle the chest with the correct answer.**

11. Keith runs from Tree A to B to C, to D to E, then to F.  
The trees are planted 134 meters apart from each other.  
How far does Keith run in all?

Keith runs \_\_\_\_\_ meters in all.





**Write the steps to your answer.**

Multiply 243 by 2.

*Example*

**Step 1** Multiply 3 ones by 2.  
 $2 \times 3 \text{ ones} = 6 \text{ ones}$

$$\begin{array}{r} 243 \\ \times \quad 2 \\ \hline \end{array}$$

**Step 2** Multiply 4 tens by 2.  
 $2 \times 4 \text{ tens} = 8 \text{ tens}$

$$\begin{array}{r} 243 \\ \times \quad 2 \\ \hline \end{array}$$

**Step 3** Multiply 2 hundreds by 2.  
 $2 \times 2 \text{ hundreds} = 4 \text{ hundreds}$

$$\begin{array}{r} 243 \\ \times \quad 2 \\ \hline \end{array}$$

So,  $2 \times 243 = 486$ .

Multiply 323 by 3.

**Step 1**

$$\begin{array}{r} 323 \\ \times \quad 3 \\ \hline \end{array}$$

**Step 2**

**Step 3**



# Put On Your Thinking Cap!



## Challenging Practice

Fill in the missing numbers.

1.

$$\begin{array}{r} 2 \square \\ \times 2 \\ \hline 48 \end{array}$$

2.

$$\begin{array}{r} 17 \\ \times \square \\ \hline 68 \end{array}$$

3.

$$\begin{array}{r} \square 31 \\ \times 3 \\ \hline 693 \end{array}$$

4.

$$\begin{array}{r} 121 \\ \times \square \\ \hline 605 \end{array}$$

5.

$$\begin{array}{r} 308 \\ \times \square \\ \hline 616 \end{array}$$

6.

$$\begin{array}{r} 1\square 5 \\ \times 4 \\ \hline 540 \end{array}$$

7.

$$\begin{array}{r} \square 52 \\ \times 3 \\ \hline 756 \end{array}$$

8.

$$\begin{array}{r} 1\square 8 \\ \times 4 \\ \hline 592 \end{array}$$





# Put On Your Thinking Cap!

## Problem Solving

### Solve.

Frank has 100 geese and cows on his farm.  
The animals have a total of 340 legs.  
How many geese and cows does Frank have?

Guess and check  
your answer.



Geese (2 legs)	Cows (4 legs)	Total number of legs	Correct (✓) / Wrong (X)
$50 \times 2 = 100$	$50 \times 4 = 200$	$100 + 200 = 300$	X
$60 \times 2 = 120$	$40 \times 4 = 160$	$120 + 160 = 280$	X

Frank has \_\_\_\_\_ geese and \_\_\_\_\_ cows.