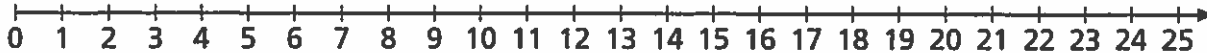


## Chapter 9: Multiplying Multi-Digit Numbers

1. a) Skip count forward by 3s to 24. Use the number line.



b) How many 3s did you count? \_\_\_\_\_

c)  $8 \times 3 =$  \_\_\_\_\_

d)  $8 \times 6 =$  \_\_\_\_\_

2. Write a multiplication sentence for each.

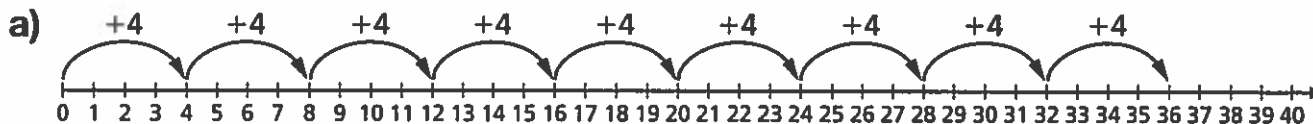
a)  $8 + 8 + 8 + 8 + 8 + 8$  \_\_\_\_\_ = \_\_\_\_\_

b) 4 groups of 7 \_\_\_\_\_ = \_\_\_\_\_

c)  $9 + 9 + 9 + 9$  \_\_\_\_\_ = \_\_\_\_\_

d) 5 groups of 6 \_\_\_\_\_ = \_\_\_\_\_

3. What multiplication does each number line show?



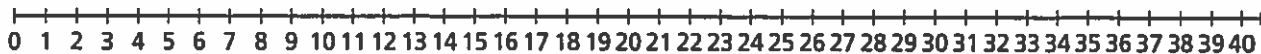
$9 \times$  \_\_\_\_\_ = \_\_\_\_\_



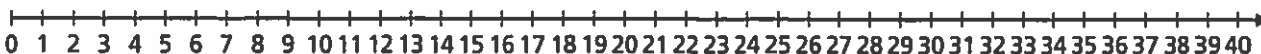
\_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

4. Show each multiplication on a number line. Write the product.

a)  $8 \times 5 =$  \_\_\_\_\_



b)  $6 \times 6 =$  \_\_\_\_\_



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

5. Use one fact to calculate another product.

- a)  $5 \times 3 = 15$ , so  $6 \times 3 =$  \_\_\_\_\_ d)  $6 \times 6 = 36$ , so  $6 \times 7 =$  \_\_\_\_\_  
b)  $3 \times 6 = 18$ , so  $4 \times 6 =$  \_\_\_\_\_ e)  $7 \times 7 = 49$ , so  $8 \times 7 =$  \_\_\_\_\_  
c)  $4 \times 5 = 20$ , so  $4 \times 6 =$  \_\_\_\_\_ f)  $8 \times 9 = 72$ , so  $9 \times 8 =$  \_\_\_\_\_

6. 9 cars are carrying 4 students each. How many students are in the cars?

7. Use doubles to complete the products.

- a)  $5 \times 3 = 15$ , so  $5 \times 6 =$  \_\_\_\_\_ d)  $6 \times 4 = 24$ , so  $6 \times 8 =$  \_\_\_\_\_  
b)  $7 \times 3 = 21$ , so  $7 \times 6 =$  \_\_\_\_\_ e)  $7 \times 4 = 28$ , so  $7 \times 8 =$  \_\_\_\_\_  
c)  $8 \times 3 = 24$ , so  $8 \times 6 =$  \_\_\_\_\_ f)  $8 \times 4 = 32$ , so  $8 \times 8 =$  \_\_\_\_\_

8. How many days are in 6 weeks?

9. Calculate.

- a)  $4 \times 4 =$  \_\_\_\_\_ d)  $7 \times 7 =$  \_\_\_\_\_  
b)  $5 \times 5 =$  \_\_\_\_\_ e)  $8 \times 8 =$  \_\_\_\_\_  
c)  $6 \times 6 =$  \_\_\_\_\_ f)  $9 \times 9 =$  \_\_\_\_\_

10. Use one fact to complete another product.

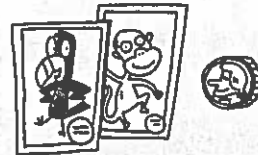
- a)  $4 \times 10 = 40$ , so  $4 \times 9 =$  \_\_\_\_\_ d)  $10 \times 9 = 90$ , so  $9 \times 9 =$  \_\_\_\_\_  
b)  $5 \times 10 = 50$ , so  $5 \times 9 =$  \_\_\_\_\_ e)  $10 \times 7 = 70$ , so  $9 \times 7 =$  \_\_\_\_\_  
c)  $6 \times 10 = 60$ , so  $6 \times 9 =$  \_\_\_\_\_ f)  $10 \times 8 = 80$ , so  $9 \times 8 =$  \_\_\_\_\_

11. Calculate.

- a)  $7 \times 8 =$  \_\_\_\_\_ c)  $6 \times 0 =$  \_\_\_\_\_  
b)  $9 \times 3 =$  \_\_\_\_\_ d)  $2 \times 8 =$  \_\_\_\_\_

12. The computer room has 8 tables. Each table seats 7 students.  
How many students can sit at the tables in the computer room?

**Ricardo Cardenza**, President  
Cardenza Collector Card and Coin Company



Dear Students:

I'm so honored to have your help and so glad that you've been working hard on learning your multiplication facts. You're going to need those strong multiplication skills now because our work is becoming more challenging.

To help you with the toughest facts—the sixes, sevens, and eights facts—I have arranged for you to receive official Cardenza Company training, with our best Math Secrets yet.

The first of these Super Math Secrets is the Friendly Chunks strategy. Today, I want you to learn this new Super Strategy and use it to calculate a special card order for us. These facts use the biggest factors on the times table, but I believe that your smart solving and our advanced strategy will make you expert toughie solvers.

Use your Friendly Chunks Strategy to complete this order!

Toughie Card Packs			
	Order	Friendly Chunk Facts	Final Product
1.	7 packs of 8 cards	$3 \times 8 = 24$ and $4 \times 8 = 32$	$24 + 32 = 56$
2.	6 packs of 9 cards		
3.	8 packs of 7 cards		
4.	9 packs of 8 cards		
5.	7 packs of 9 cards		
6.	6 packs of 7 cards		

Happy Toughie-zapping,

*Ricardo Cardenza*

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

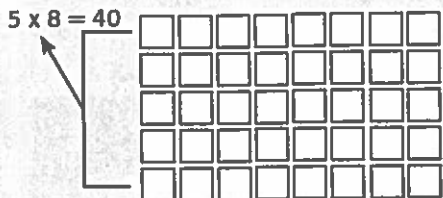
Date: \_\_\_\_\_

WORD PROBLEM

Tom bought 7 packs of Collectible Vegetable cards. There are 8 cards in each pack.  
How many cards did Tom buy in all?

BASICS BOX

You can solve tricky facts by putting your groups into Friendly Chunks. To solve  $7 \times 8$ , take 7 groups of 8:



+



$40 + 16 = 56$

Find easier facts in your tough fact:

5 groups of 8 = 40

2 groups of 8 = 16

Add these products together:

$40 + 16 = 56$

$7 \times 8 = 56$

PRACTICE

Solve using Friendly Chunks. Draw a picture to show how you made Friendly Chunks.

1.  $8 \times 7 = \underline{\quad}$

2.  $7 \times 6 = \underline{\quad}$

Find the products.

3.  $9 \times 4 = \underline{\quad}$

7. 
$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

4.  $6 \times 9 = \underline{\quad}$

8. 
$$\begin{array}{r} 7 \\ \times 5 \\ \hline \end{array}$$

5.  $7 \times 4 = \underline{\quad}$

6.  $7 \times 8 = \underline{\quad}$

9. 
$$\begin{array}{r} 8 \\ \times 6 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

JOURNAL

What are the easiest facts to use for Friendly Chunks?