

Name _____

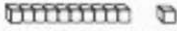

Multiply with 11 and 12**Essential Question** What strategies can you use to multiply with 11 and 12?**UNLOCK the Problem** REAL WORLD

It takes Bobby 11 minutes to walk to school each morning. How many minutes will Bobby spend walking to school in 5 days?

- What are the groups in this problem?

Multiply. $5 \times 11 = \square$

One Way Break apart an array.

Make 5 rows of 11. 
 Use the 10s facts and the 1s facts to multiply with 11. 

$$5 \times (10 + 1)$$

$$5 \times 10 = \underline{\quad} \quad 5 \times 1 = \underline{\quad}$$

$$5 \times 11 = \underline{\quad} + \underline{\quad}$$

$$5 \times 11 = \underline{\quad}$$

So, Bobby will spend _____ minutes walking to school.

Another Way Find a pattern.

Look at the list. $1 \times 11 = 11$

$$2 \times 11 = 22$$

Notice the product has the same factor in the

$$3 \times 11 = 33$$

tens and ones places. $4 \times 11 = 44$

$$5 \times 11 = \underline{\quad}$$

To find 5×11 , write the first factor in the

$$6 \times 11 = 66$$

tens and ones places. $7 \times 11 = 77$

$$8 \times 11 = 88$$

$5 \times 11 = 55$ $9 \times 11 = 99$

$$9 \times 11 = 99$$

Try This! What if it took Bobby 12 minutes to walk to school?

How many minutes will he spend walking to school in 5 days?

Break apart the factor 12.

$$5 \times (10 + 2)$$

$$5 \times 10 = 50 \quad 5 \times 2 = 10$$

$$5 \times 12 = \underline{\quad} + \underline{\quad} = \underline{\quad}$$

So, $5 \times 12 = \underline{\quad}$. Bobby will spend _____ minutes walking to school.

Double a 6s fact.

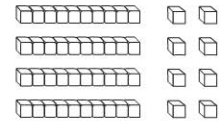
Find the 6s product. $5 \times 6 = 30$

Double that product. $\underline{\quad} + \underline{\quad} = \underline{\quad}$

Share and Show



1. How can you use the 10s facts and the 2s facts to find 4×12 ?



Find the product.

2. $9 \times 11 = \underline{\quad}$

3. $7 \times 12 = \underline{\quad}$

4. $\underline{\quad} = 4 \times 11$

On Your Own

Find the product.

5. $\underline{\quad} = 11 \times 6$

6. $\underline{\quad} = 12 \times 2$

7. $0 \times 11 = \underline{\quad}$

8. $\underline{\quad} = 6 \times 12$

9. $8 \times 12 = \underline{\quad}$

10. $7 \times 11 = \underline{\quad}$

11. $12 \times 9 = \underline{\quad}$

12. $3 \times 12 = \underline{\quad}$

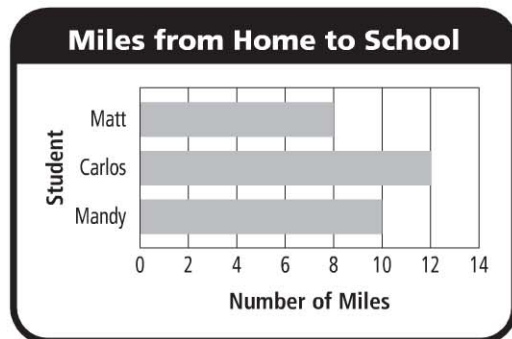
13. $1 \times 12 = \underline{\quad}$

Problem Solving



Use the graph for 14–15.

14. The graph shows the number of miles some students travel to school each day. How many miles will Carlos travel to school in 5 days?



15. Suppose that Mandy takes 9 trips to school, and Matt takes 11 trips to school. Who travels more miles? **Explain.**
