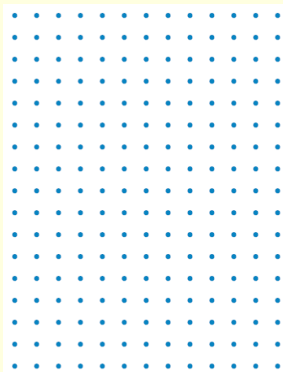


Mr. McDaniel has 36 tomato plants. He wants to plant them in a rectangular array consisting of at least 2 rows with at least 2 tomato plants in each row. On the grid at the right, draw three possible arrays.



List all the factors for 36. Then circle the factors that are prime.

\_\_\_\_\_

Is 36 a prime or composite number? \_\_\_\_\_

How can you tell?

\_\_\_\_\_

Is 19 a prime or composite number? \_\_\_\_\_

How can you tell?

\_\_\_\_\_

Suppose you are playing Factor Captor with this grid. Which number would you choose to cover next? \_\_\_\_\_

●	2	2	●	2	2
2	3	3	3	●	3
3	●	4	4	4	5
●	5	5	6	6	●
7	8	8	●	9	10
10	11	12	●	14	15
16	18	●	21	22	24
25	●	27	28	●	32

WHY? \_\_\_\_\_

\_\_\_\_\_

Use this calendar and the following clues to figure out the date that Molly's dance recital is being held.

- ✓ The date is not an odd number.
- ✓ The date is not a square number.
- ✓ The date is not a prime number.
- ✓ The date is not a multiple of 3.
- ✓ The date is not a multiple of 5.
- ✓ The date is a multiple of 11.

S	M	T	W	T	F	S
	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			

On what date is Molly having her recital? \_\_\_\_\_

<p>Write an 8 digit number that has:</p> <p>3 in the ten-thousands place          5 in the hundreds place          9 in the hundred-thousands place          2 in the hundreths place          6 in the ones place          0 in all the other places</p> <p>_____</p> <p>Write this number in words:          _____          _____          _____</p>	<p>Write a 9 digit number that has:</p> <p>2 in the thousands place          8 in the tens place          1 in the millions place          2 in the tenths place          4 in the ten-thousands place          0 in all the other places</p> <p>_____</p> <p>Write this number in words:          _____          _____          _____</p>
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What is the Prime Factorization of 18?  
 \_\_\_\_\_

Write the Prime Factorization of 18 using exponents.  
 \_\_\_\_\_

What is the Prime Factorization of 36?  
 \_\_\_\_\_

Write the Prime Factorization of 36 using exponents.  
 \_\_\_\_\_

Fill in the missing numbers:

$9^2 = \underline{\quad}$	$4^2 = \underline{\quad}$
$8^2 = \underline{\quad}$	$6 \times 6 = \underline{\quad}$
$3^2 = \underline{\quad}$	$49 = \underline{\quad}^2$

**Divisibility**

Name a number between 100 and 200 that is divisible by 2, but not by 3.

Name a number between 100 and 200 that is divisible by 2, 3, and 5.