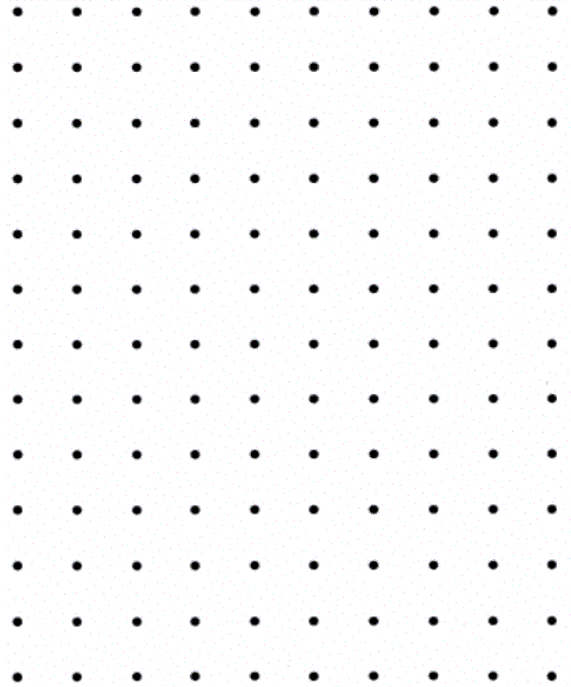# Unit 1 Review

1. Mr. Matin has 24 tulip bulbs. He wants to plant them in a rectangular array consisting of at least 2 rows with at least 2 tulips in each row. On the grid at the right, draw three possible arrays.

2. List all of the factors of 16.

_____

_____

3. Is 16 a prime or composite number?

_____

How can you tell?

_____

_____

4. Circle the factors in Problem 2 that are prime numbers.

5. Suppose you are playing Factor Captor on the number grid at the right. The crossed-out numbers have already been picked. Which number would you choose next?

_____

Why? _____

_____

_____

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

S	M	T	W	T	F	S

6. At the right is a calendar for a month. Use the following clues to figure out the date that Bret Harte School won its last basketball game.

	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			

- The date is not an even number.
- The date is not a square number.
- The date is not a prime number.
- The date is a multiple of 5.

On which date did the school win its last basketball game? _____

7. a. Write an 8-digit number that has
2 in the ones place,
6 in the thousands place,
9 in the hundred thousands place,
5 in the hundredths place,
and 0 in all other places.

b. Write the number in words
_____
_____
_____
_____

____ ____ ____, ____ ____ ____ . ____ ____

8. Write the prime factorization for 24. _____

9. Write the prime factorization of 24 using exponents. _____

10. Fill in the missing numbers.

a. $7^2 = $ _____   **b.** $9^2 = $ _____   **c.** $36 = $ _____^{2}

a. $5^2 = $ _____   **b.** $10^2 = $ _____   **c.** $8 * 8 = $ _____$_2$

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

12. Name a number between 300 and 400 that is divisible by 2, 3, and 5. _____