## Factor Rainbows, Squares, and Square Roots

1. List all the factors of each square number. Make a factor rainbow to check your work. Then fill in the missing numbers.


Reminder: In a factor rainbow, the product of each connected factor pair should be equal to the number itself.


For example, the factor rainbow for

$$
1 * 16=16
$$

$$
2 * 8=16
$$

$$
4 * 4=16
$$ 16 looks like this:

Example:
4: 1, 2,4 $\overparen{124}$ 9:
$\sum^{2}=4$ The square root of 4 is $\underline{2}$. $ـ^{2}=9$ The square root of 9 is

25:
36:
${ }^{2}=25$ The square root of 25 is $\qquad$ $L^{2}=36$ The square root of 36 is $\qquad$
2. Do all square numbers have an odd number of factors? $\qquad$

Unsquare each number. The result is its square root. Do not use the square root key $\sqrt{ }$ on your calculator.
3. $\qquad$ $=121$
4. $\quad=2,500$

The square root of 121 is $\qquad$ The square root of 2,500 is $\qquad$
5.
4,318
$\begin{array}{r}1,901 \\ \hline\end{array}$
6.

36
$\begin{array}{r} \\ \times 85 \\ \hline\end{array}$
7.

| 2,852 |
| ---: |
| $\times \quad 5$ |

Practice
8. $50 \div 6 \rightarrow$ $\qquad$ 9. $333-291=$ $\qquad$

