## Essential Question: How do I write equations using two variables?

| Questions /Main Ideas | Class Notes |
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| What is an equation in two |  |
| variables? |  | | An equation in two variables represents two quantities that |
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| change in relationship to one another. A solution of an equation |
| in two variables is an ordered pair that makes the equation true. |
| Is $(3,6)$ a solution to $y=2 x ?$ |
| Substitute. Does $6=2(3) ?$ Yes, so it IS a solution. |
| What are independent and |
| dependent variables? | | The variable representing the quantity that can change freely is <br> the independent variable. The other variable is called the <br> dependent variable because its value DEPENDS on the <br> independent variable. |
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| What is the distance |
| formula? | | To find the distance traveled d, multiply the speed r, by the time |
| :--- |
| t. |
| $\mathrm{d}=\mathrm{rt}$ |

## Summary

We can write and use equation that have two variables in them. These variables will often depend on each other for their values. The dependent variable with DEPEND on the independent variable.

