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## Multiple Solutions

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1. For each of the following equalities and inequalities, find two values for  $x$  that make the statement true.

a.  $x^2 = 121$

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b.  $x^2 = x$

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\_\_\_\_\_

c.  $x^2 < x$

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d.  $(x-1)(5x^4 - 7x^3 + x) = 0$

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e.  $1776x + 1066 \geq 365$

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f.  $x^2 > x^3$

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g.  $|x| = x$

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2. Some of the equations and inequalities on the page opposite have exactly two solutions; others have more than two solutions.

- a. Write down two equations or inequalities that have exactly two solutions.  
Explain your answer.

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- b. Write down one equation or inequality that has more than two solutions, but not infinitely many solutions. How many solutions does it have?

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- c. Write down two equations or inequalities that have an infinite number of solutions.

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