1. Solve the equation
2. A car radiator contains 10 liters of a 30% antifreeze solution. How many liters will have to be replaced with pure antifreeze if the resulting solution is to be 50% antifreeze?
3. A rectangular plot of ground having dimensions 16 feet by 14 feet is surrounded by a walk of uniform width. If the total area of the plot is 1224 , what is its width?
4. Solve the inequality
5. Find the real solution(s)
6. For what value of c is the number **a** a solution of the equation?

1. Solve by completing the square.



1. Express the inequality:

As an interval.



1. A student in an Advanced Geometry course has test scores of 83, 91, 95 & 87. What score on the next test will raise the student’s average to 90?
2. For what values of x is:
3. A fashion consultant’s time is billed at $70 an hour, & her style assistant at $38 an hour. A customer received a bill for $812 for a certain job. If the assistant worked 6 less than the consultant, how much time did each bill on the job?
4. Solve the inequality:

Express in terms of intervals.

1. Express the inequality:

As an interval.

1. Solve by factoring.
2. For what values of x is:

Around the world Key

3. 1 (make y –max 10,000)