

Name: _____

Date: _____

Build a quadratic from the story, set = 0, factor. Reject answers that make no physical sense. Last two are challenge problems!

- 1.** A rectangle: length x , width $x - 3$, area 40. Write the equation.

show your work

- 2.** Solve it and give the dimensions.

show your work

- 3.** Two consecutive integers multiply to 56. Write the equation.

show your work

- 4.** Solve: consecutive integers with product 56.

show your work

5. A number plus its square is 30.
Find it.

show your work

6. A square garden's area is 49 sq ft.
Side length?

show your work

7. A rectangle is 2 longer than wide,
area 35. Dimensions?

show your work

8. A photo (x by x) gets a 2-in border;
framed area is 100. Find x .

show your work

- 9.** A rectangle's length is 3 more than ★ CHALLENGE twice its width; area is 44. Find both dimensions.

show your work

- 10.** The product of two numbers that ★ CHALLENGE differ by 5 is 84. Set up and solve, giving both pairs.

show your work