Lesson 2.1.4 Resource Page
Problem 2-47

Find the $x$-intercepts of $y = (x - 3)^2 - 25$

a. $y = (x - 3)^2 - 25$

   justification: the $x$-intercepts are where $y = 0$

b. $0 = (x - 3)^2 - 25$

   justification:

c. $25 = (x - 3)^2$

   justification:

d. $\sqrt{25} = \sqrt{(x - 3)^2}$

   justification:

e. $5 = |x - 3|$

   justification:

f. $5 = x - 3$  $-5 = x - 3$

   justification:

g. $8 = x$  $-2 = x$

h. The $x$-intercepts are (8, 0) and (–2, 0).