INTERMEDIATE ALGEBRA—concluded

9 Form, in two different ways, the equation whose roots are \( \sqrt{5} - 3 \) and \( \sqrt{5} + 3 \). [Show all work on the paper.]

10 Solve and check:
\[
\frac{6\sqrt{y} - 8}{\sqrt{2y} - 8} = \sqrt{2}
\]

11 In the formula \( h = r - \sqrt{r^2 - (\frac{1}{2}w)^2} \):
   a Solve for \( w \) in terms of \( r \) and \( h \)
   b Find \( w \) to the nearest tenth when \( h = 6.7 \), \( r = 8.2 \)

12 Represent graphically each equation in the following set and from the graphs determine the solutions to this set of equations:
\[
x^2 + y^2 = 40 \\
x - 2y + 10 = 0
\]