

5.4, 1.3 Square Roots

Name _____ Hour _____

Simplify each square root.

1) $\sqrt{1}$

3) $\sqrt{16}$

5) $\sqrt{60}$

7) $2\sqrt{18}$

2) $3\sqrt{81}$

4) $\sqrt{225}$

6) $\sqrt{72}$

8) $4\sqrt{300}$

Solve each equation for x . Leave you answer in simplified radical form.

9) $x^2 = 900$

14) $-(x - 4)^2 + 9 = 0$

10) $x^2 = 125$

15) $2x^2 - 16 = 0$

11) $x^2 = \frac{4}{49}$

16) $(x + 6)^2 = 3$

12) $x^2 - 4 = 0$

17) $2(x - 1)^2 = 40$

13) $\frac{(x+3)^2}{2} = 2$

Find the vertex and zeros (x -intercepts) for each function.

18) $f(x) = (x - 1)^2 - 1$

19) $g(x) = (x + 2)^2 + 3$

20) $h(x) = -(x + 5)^2$