

Name: _____ Date: _____ Period: _____

Algebra 1CP Practice Test on 10.1-10.3 Show your work for credit, and write your answer in the answer box

Simplify completely

1) $\sqrt{72x^8y^7}$

6) $(-9 + \sqrt{5x})(2 + \sqrt{5x})$

2) $2\sqrt{6} + 7\sqrt{6}$

7) $\sqrt{\frac{16}{64}}$

3) $-4\sqrt{12} - 5\sqrt{48} + 3\sqrt{45}$

8) $\frac{5\sqrt{11}}{4\sqrt{7}}$

4) $6\sqrt{3} \cdot 7\sqrt{5}$

9) $\frac{\sqrt{3}}{6-\sqrt{5}}$

5) $\sqrt{5}(8 - 9\sqrt{3})$

Solve the following equations. Check for extraneous solutions.

10) $8 + \sqrt{-4m + 13} = m$

12) $\sqrt{n} = 7$

11) $\sqrt{2n + 15} = 3$

13) $x + 3 = \sqrt{x + 59}$

1) _____

2) _____

3) _____

4) _____

5) _____

6) _____

7) _____

8) _____

9) _____

10) _____

11) _____

12) _____

13) _____

14) _____

14) The distance in miles that the lookout of a submarine can see is approximately $d = 1.22\sqrt{h}$, where h is the height in feet above the surface of the water. How far would a submarine periscope have to be above the water to locate a ship 9 miles away? Round your answer to the nearest tenth.