MATH 125 College Algebra Blitzer 7th Edition Name:_____

Section 1.6 Other Types of Equations Professor Anna Cox

Solve: $3x^4 - 48x^2 = 0$

Solve: $3x^3 + 2x^2 = 12x + 8$

Solve: $\sqrt{2x+13} = x+7$

Solve: $\sqrt{x-5} - \sqrt{x-8} = 3$

Solve: $6x^{\frac{5}{2}} - 12 = 0$

Solve: $(x-4)^{\frac{2}{3}} = 16$

Solve: $x^4 - 5x^2 + 4 = 0$

Solve: $x^{\frac{2}{3}} - x^{\frac{1}{3}} - 6 = 0$

Solve: $|x - 2| = 7$

Solve: $4\left|1 - \frac{3}{4}x\right| + 7 = 10$

The formula $t = \frac{\sqrt{d}}{2}$ models a basketball player's hang time, *t*, in seconds, in terms of the vertical distance, *d*, in feet. If the hang time is 1.16 seconds, what is the vertical distance of the jump, to the nearest tenth of a foot?