

Solve for x

1. $3x - (x + 7) = \frac{x}{2}$

2. $\frac{5}{2}(x - 2) = \sqrt{4x^2}$

3. $\sqrt[3]{\left(\frac{x}{3}\right)} - 1 = 1$

4. $\frac{\sqrt{x}}{2} + 5 = 7(\sqrt{x} - 2)$

5. $-9x + 7 = \frac{3}{2}(2 - 6x)$

6. $-(-2 - 3x) = \sqrt{2}(\sqrt{8} + \frac{x}{\sqrt{2}})$