

## Homework #17

Solve:

1.  $x^2 + 3x - 130 = 0$

2.  $x^2 = 9x$

3.  $7x - 9 = 10x + 11$

4.  $\frac{m+3}{4} = m + 8$

5.  $x + 5 = \frac{2x + 18}{x}$

6.  $10x = x^2 - 39$

7.  $(x - 2)^2 = 49$

8.  $3(2 - x) = 4(1 + x)$

Solve:

9.  $x + 3 = \frac{48}{x + 1}$

10.  $4 = \sqrt{2 - t}$

11.  $x = \frac{18}{x} + 7$

12.  $8 - b^2 = 2b$

13.  $\frac{3}{x + 2} = \frac{4}{x - 1}$

14.  $\frac{x}{x + 5} = \frac{x}{x - 2}$

15.  $\frac{k}{1 - k} = \frac{5}{k - 1}$

16.  $3^{x+1} = 81$

Make  $x$  the subject:

17.  $y = \sqrt{x^2 + 6}$

18.  $y = \frac{5}{x - 2}$

19.  $y = -5x + 3$

20.  $y \leq 2x + 7$

21.  $y = (x - 7)^2$

22.  $\frac{1}{k + 2} = \frac{t}{x - a}$

23.  $y = \sqrt{\frac{\pi}{x^2}}$

24.  $y = x^2 + 8x + 16$