

## Math 190 Domain and Trig Worksheet

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### Questions:

1. Find the domain of the following functions
  - (a)  $x^2 - 7x - 18$
  - (b)  $\sin x$
  - (c)  $\tan x$
  - (d)  $\sqrt{x^2 - x - 2}$
  - (e)  $\frac{5x^2 - 3x + 2}{5x^2 - x - 18}$
  - (f)  $\frac{5x^2 - x - 18}{5x^2 - 3x + 2}$
2. Find the zeros of each of the functions from question 1.
3. Plot the graphs of  $\sin x$ ,  $\cos x$  and  $\tan x$ .
4. Compute
  - (a)  $\cos(3\pi/4)$
  - (b)  $\sin(-\pi/4)$
  - (c)  $\tan(11\pi/3)$
5. Find all  $x$  in  $[0, 2\pi)$  satisfying the following
  - (a)  $\sin x = \cos x$
  - (b)  $\cos^2 x - \sin x - 1 = 0$