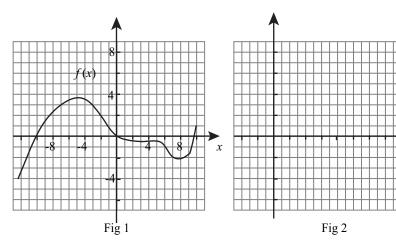
Functions Worksheet 1



- 1. Given the graph of function f(x) in Fig 1, find the intervals where f(x) is increasing/decreasing.
- 6. Describe the end behaviour of $f(x) = x^3 2x^2 8x$.
- 2. Referring to the function f(x) in Fig 1, find the x and y intercepts of the function.
- 7. Find the maxima/minima of the function $f(x) = 5x^2 + 7x + 15$.
- 3. Give an equation of a function for which y > 0 for all values of x.
- 8. Find the intercepts and asymptote of the function $f(x) = \frac{1}{2x} 5$ for x > 0.
- 4. Find the equation of a parabola with x-intercepts at (-1,0) and (3,0) and y-intercept at (0,-1).
- 9. Plot the function in the grid provided above (Fig 2).
- 5. Find the period of the function $g(x) = \cos(t^2 7\pi)$?
- 10. Find the axis of symmetry of $f(x) = -6x^2 + 7x + 5$.

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