1. Find the area of the triangle which has sides that measure 10m, 14m and 18m. Approximate your result to the nearest tenth.

2. The edges of a cube are expanding at a rate of 3 cm per second. Find the rate of change of the volume when the sides measure exactly 5 cm.

3. Find the equation of the line secant to the graph of $f(x) = -x^2 + 2$ at x = 1 and x = 2.

4. Find the area between the graphs of $f(x) = \cos x$ and $g(x) = \sin x$.