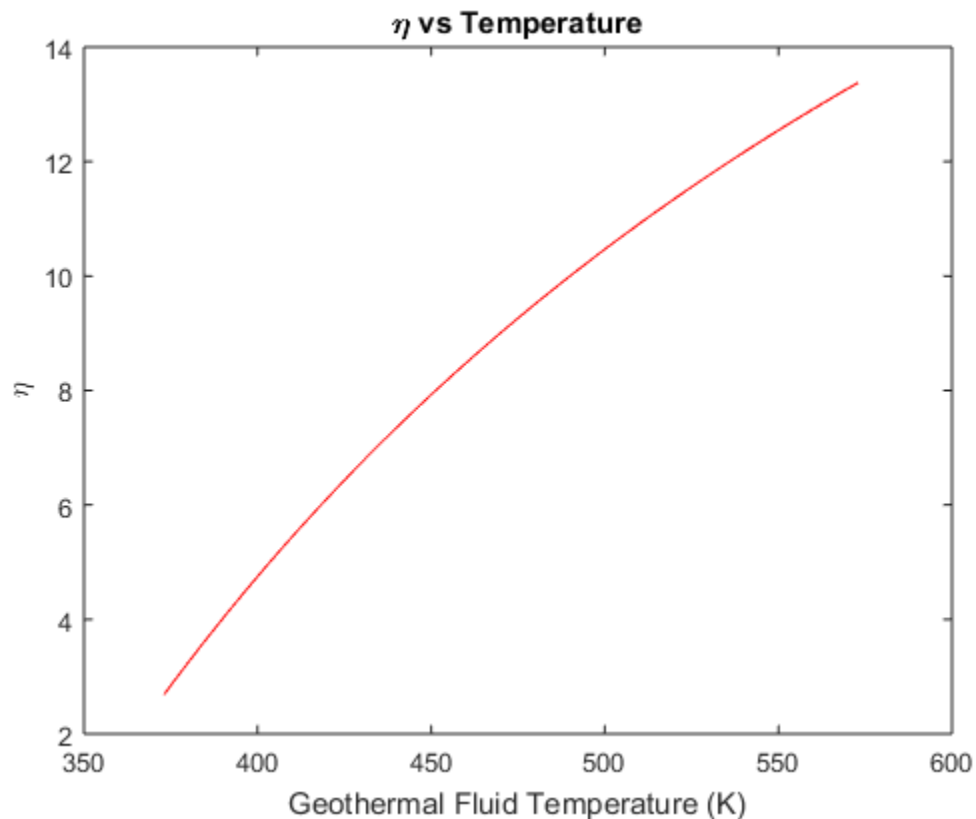

```

%Cold Reservoir Temperature of 70C
%Plot efficiency of the geothermal fluid temperature from 100C to 300C
%If a minimum efficiency of 5% is necessary to make the utilization of
the
%resource economical, what minimum geothermal fluid temperature is
needed
clc; clear; close all;
Tc = 70 + 273;%Cold Reservoir Temperature in Kelvin
Th = linspace(100,300,1000) + 273; %Geothermal Fluid Temperature in
Kelvin
eff = (1/3) .* (100.*(1 - (Tc ./Th)));%Vector of efficiencies
%Plotting
figure()
plot(Th, eff, 'r')
xlabel('Geothermal Fluid Temperature (K)')
ylabel(sprintf('\eta'));
title(sprintf('\eta vs Temperature'));
minInd = find(eff < 5, 1, 'last' );
fprintf('Minimum Efficiency %f | Minimum Temperature (K) %f\n', ...
    eff(minInd), Th(minInd));

```

Minimum Efficiency 4.993048 | Minimum Temperature (K) 403.430430



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