```
clc
syms f(x)
f(x) = (8*x^2 + 82*x + 200)/x;
df = diff(f,x);
cv = solve(df,x);
d2f = diff(df,x);
ans = 0;
for i = (1:length(cv))
    d2fval = subs(d2f,x,cv(i));
    if d2fval < 0
        fprintf(" %f is a point of maximum ", cv(i))
    elseif d2fval > 0
            ans = cv(i);
            fprintf(" %f is a point of minimum", cv(i))
    else
        fprintf(" test is not conclusive\n")
    end
end

fprintf("\nThe reqired dimensions are %f and %f",ans+4, (50/ans)+8)
```

```
 -5.000000 is a point of maximum  5.000000 is a point of minimum
The reqired dimensions are 9.000000 and 18.000000
```

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