ENGR 102 HW 1

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>> % Problem 1
>> % A
>> (22+5.1^2) / (50-6.3^2)

ans =

    4.6566

>> % B
>> 44/7 + 8^2/5 - 99/3.9^2

ans =

   12.5768

>> % Problem 2
>> % A
>> cos((7*pi)/9) + (tan((7/15)*pi))*sind(15)

ans =

    1.6965

>> % B
>> (sin(80))^2-((cosd(14)*sind(80))^2)/0.18^1/3

ans =

   -0.7031

>> % Problem 3
>> a=19

a =

    19

>> b=5.6
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b =

    5.6000

>> c=(3*a) / b^2

c =

    1.8176

>> d=((a-b)^c)/c

d =

   61.5360

>> % A
>> a/b+(d-c)/(d+c)-(d-b)^2

ans =

  -3.1245e+03

>> % B
>> (exp(1))^((d-c)/(a-2*b)) + log(abs(c-d+(b/a)))

ans =

   2.1178e+03

>> % Problem 4
>> % A
>> (22+5.1^2) / (50-6.3^2)

ans =

    4.6566
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>> % B
>> 44/7 + 8^2/5 - 99/3.9^2

ans =

   12.5768

>> % Problem 5
>> % A
>> (sqrt(41^2-5.2^2))/exp(1)^5-100.53

ans =

 -100.2560

>> % B
>> 132^1/3+(log(500))/8

ans =

   44.7768

>> % Problem 6
>> % A
>> (14.8^3-6.3^2)/((sqrt(13)+5)^2)

ans =

   43.2392

>> % B
>> 45*((288/9.3)-4.6^2) - 1065*exp(-1.5)

ans =

  203.7148

>> % Problem 7
>> % A
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>> (24.5+(64/3.5^2)+8.3*12.5^3)/(sqrt(76.4) - (28/15))

ans =

   2.3626e+03

>> % B
>> ((5.9^2-2.4^2)/3)+((log10(12890))^2)/exp(.3)

ans =

   22.1988

>> % Problem 8
>> % A
>> cos((7*pi)/9)+tan((7*pi)/15)*sind(15)

ans =

    1.6965

>> % B
>> (sin(80))^2-((cosd(14)*sind(80))^2)/0.18^1/3

ans =

   -0.7031

>> % Problem 9
>> x=5

x =

     5

>> % A
>> 0.01*x^5-1.4*x^3+80*x+16.7

ans =
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  272.9500

>> % B
>> sqrt(x^3+exp(x)-(51/x))

ans =

   16.2238

>> % Problem 10
>> t=2

t =

     2

>> % A
>> 56*t-9.81*((t^2)/2)

ans =

   92.3800

>> % B
>> 14*exp(-0.1*t)*sin(2*pi*t)

ans =

  -5.6149e-15

>> % Problem 11
>> x=2

x =

     2

>> y=4
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```
y =

     4

>> % A
>> (3/4)*x*y-(7*x/y^2)+sqrt(x*y)

ans =

    7.9534

>> % B
>> (x*y)^2-((x+y)/(x-y))+sqrt((x+y)/(2*x-y))

ans =

   Inf

>>
```