1. (deforindef:set1)

   For each of the following, state whether the object is a function or a number. If it is a function, state what variable it is a function of.

   (a) $\int_1^x e^{\cos(t)}dt$

   (b) $\int_1^3 \sin(s)ds$

   (c) $\int \ln(x)dx$

   (d) $\int_t^{t^3} \ln(\cos(x))dx$

   Solution:

   (a) This is a function of x.

   (b) This is a number.

   (c) This is a function of x (one of many really).

   (d) This is a function of t.

2. (deforindef:set2)

   For each of the following, state whether the object is a function or a number. If it is a function, state what variable it is a function of.

   (a) $\int_e^x e^{\sec^2(\ln(t))}dt$

   (b) $\int \arcsin(x)dx$

   (c) $\int_1^3 \arctan(s)ds$

   (d) $\int_0^{\pi t} \arccos(x))dx$

   Solution:

   (a) This is a function of x.

   (b) This is a function of x (one of many really).

   (c) This is a number.

   (d) This is a function of t.