Definitions.

Let T denote some transformation.
Let (m) denote some object (simple or complex).
Let "->" denote the process of transformation.
Let $T(m) \to (n)$ be read "transformation T on object m produces object n".
Let T_2T_1 be read "do transformation 1 first, followed by transformation 2".

Properties of transformations.

1) A transformation on an object must produce a unique result such that
      if $T(m) \to (n)$ and $T(m) \to (p)$, then $(n) = (p)$.

2) Some transformations are not directly perceivable. Such a transformation may only be inferred by the observer when it operates on multiple objects (i.e., a complex object).
      If $T(2) \to (4)$,   then T= "+2" = "x2"
      But if $T(2, 3, 19) \to (4, 5, 21)$, then T= "+2".

3) Transformations may be combined such that
      if $T_1(m) \to (n)$ and $T_2(n) \to (p)$, then $T_2T_1(m) \to (p)$.

4) Transformations do not always commute (i.e., the order in which they are done makes a difference).
      If T_1="+a" and if T_2="xb", then $T_2T_1 \neq T_1T_2$.

5) There exists an identity transformation, denoted T_0, which doesn't change the object such that
      $T_0(m) \to (m)$.

6) Some transformations are undoable.
      If $T_1(m) \to (n)$ and $T_{-1}(n) \to (m)$, then both T_1 and T_{-1} are undoable and each is the "inverse" of the other such that their combination produces the identity where $T_{-1}T_1=T_0$.

7) Some transformations are their own inverses such that
      If $T(m) \to (n)$, then $T(n) \to (m)$. Therefore, $TT=T_0$.

8) Some transformations combine objects. These are called "combining transformations" and are denoted "*" such that
      $(m) * (n)$ = the combination of (m) and (n). Combining transformations are not undoable and therefore have no inverses.

Tape studio transformations and their properties.
1) Tape dubbing (copying a pre-recorded sound from one tape to another). Properties 1 and 5.
2) Tape speed change (changes the pitch and duration of a pre-recorded sound). Propertries 1, 2, 3, 6.
3) Tape direction change (makes pre-recorded sounds sound backwards). Properties 1, 2, 3, 6, 7.
4) Tape splicing (removal of time-segments of pre-recorded sound or re-ordering of segments). Properties 1, 2, 3, 6.
5) Tape mixing (combining two or more tracks of sound into one track). Properties 1, 2, 8.
6) Filtering or equalization (changes timbre). Properties 1, 2, 3, 6.
7) Digital delay (combines normal sound with delayed sound). Properties 1, 4, 8.
8) Frequency modulation effects (two frequencies are multiplied together). Properties 1, 3, 4, 8.