

Math Basic Skills: Experts vs. Novices

Basic Skills (I): Number Facts:

Number Facts: Frequently used sums, differences, and products you must know

- Experts faster at retrieving these.
- More automated.

Number sense: Making numbers and number systems meaningful.

- Needed for good problem solving strategies.

Basic Skills (II): Algorithms

Algorithms: Sequence of steps, if performed correctly, will achieve desired outcome with 100% accuracy:

- Experts faster at retrieving these
- More automated
- Novices have more “bugs” in their procedures

Linear algebra:

- Experts faster and more accurate procedures
- Many steps composed into automatic algorithm