

## Verbal Strategies in Algebra

Verbal learners benefit from talking themselves through problems; however, that talking needs to be productive and not judgmental! Organizing work verbally is most often done in one of two ways: lists or flowcharts.

### Lists:

As you are working problems, write down a list of what you are doing.

For example:

$$\begin{array}{r}
 3x - 2 = x + 6 \\
 -x \quad -x \\
 \hline
 2x - 2 = 6 \\
 +2 \quad +2 \\
 \hline
 2x = 8 \\
 \frac{2x}{2} = \frac{8}{2} \\
 x = 4
 \end{array}$$

Subtract  $x$  from both sides  
 Add 2 to both sides  
 Divide by 2

Do this with several similar problems as you work them out. You'll start to notice some variations and some patterns. Add more explanation to your notes, and then start to streamline them. You might end up with something like:

$$\begin{array}{r}
 4x + 8 = 2x - 6 \\
 -2x \quad -2x \\
 \hline
 2x + 8 = -6 \\
 -8 \quad -8 \\
 \hline
 2x = -14 \\
 \frac{2x}{2} = \frac{-14}{2} \\
 x = -7
 \end{array}$$

Move letter to left side  
 Add/subtract - opposite sign  
 Move numbers to right side  
 Add/subtract - opposite sign  
 Divide by number in front of  $x$ , same sign

### Flowcharts:

Another useful technique for verbal learners is creating and/or using flowcharts. In flowcharts you write out steps in rectangles and questions in diamonds. Arrows guide you to your next step.

