MaThCliX® MaTh Learning CenTer

Completing the Square Tiles

By Chris Jackson

Needed:

• Completing the Square Tiles

Uses:

Factoring with Completing the Square

Activity:

- 1. Identify the x², x, and one tiles.
- Factor x²+2x+3:
- 3. Get the required tiles to make this equation (one x^2 , two x, and 3 ones)
- 4. Make a square with the tiles you have. Some may be left over or missing.
- 5. Make an equation using the square. Put this trinomial on the left side of your equation.
- 6. Count how many extra or missing squares you have. Put this number on the right side of you equation. If you had extra this number is negative. If you were missing some this number is positive.
- 7. You have now completed the square! Factor the left side of your equation and solve for X!
- 8. Factor $x^2+4x+12$ using the tiles.
- 9. Factor x²+8x+16 using the tiles.
- 10. Factor x²+6x-12 using the tiles.

