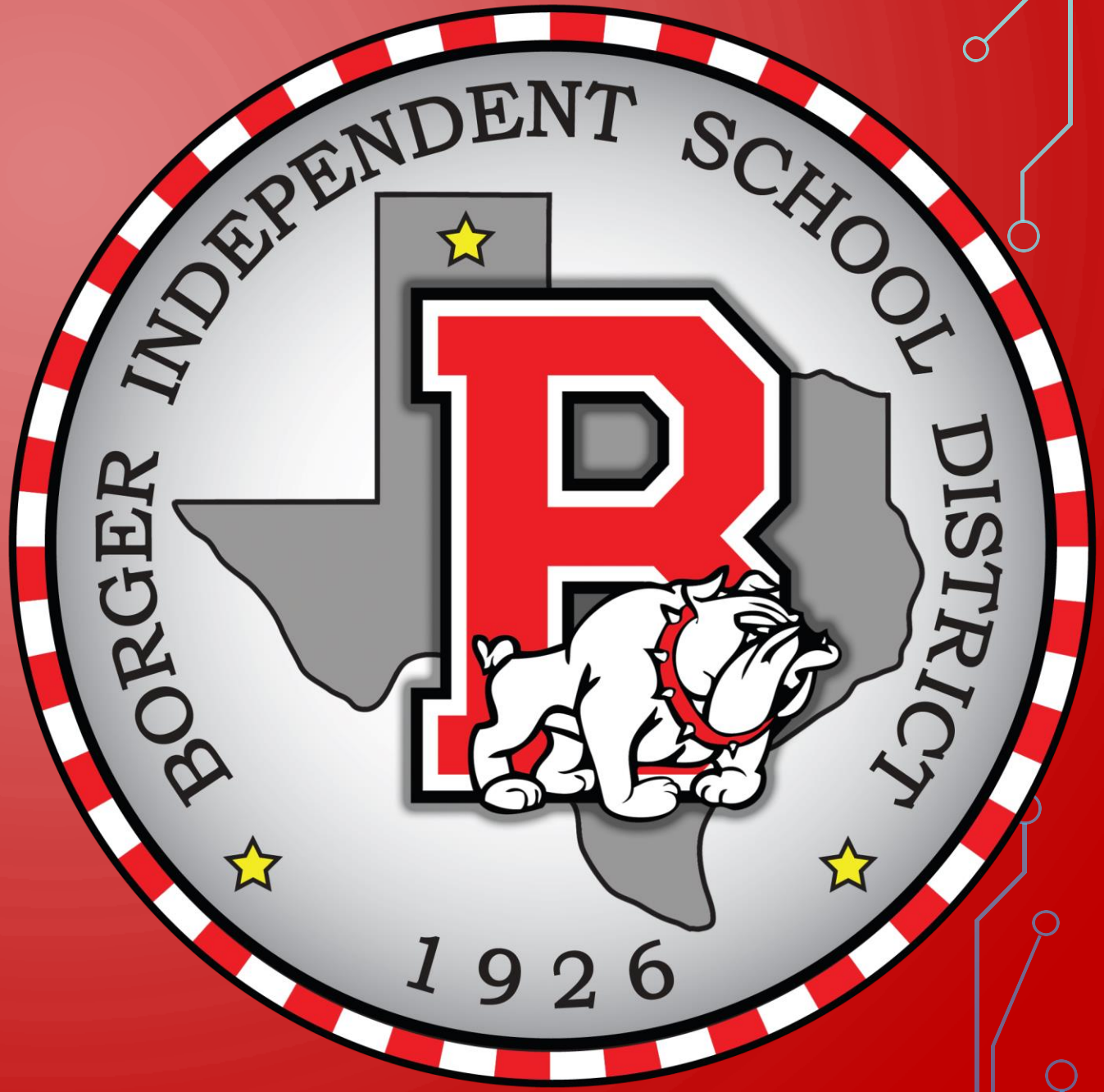
BOARD NOTES

3 FEBRUARY 2020



2A.4 (F) solve quadratic and square root equations;
2A.4 (G) identify extraneous solutions of square root equations;
2A.7 (G) rewrite radical expressions that contain variables to equivalent forms;
2A.7 (H) solve equations involving rational exponents;

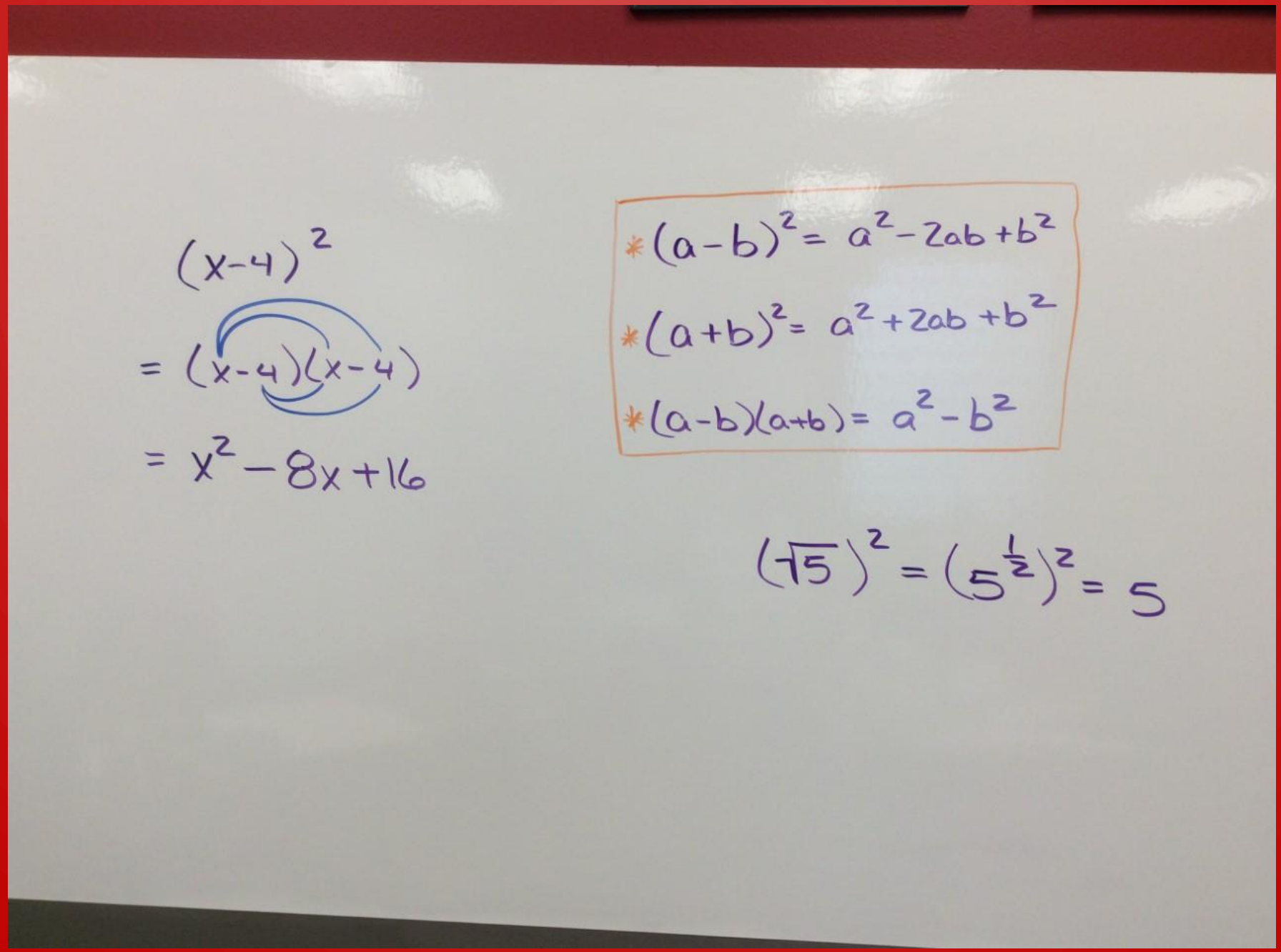
We will be able to square expressions. (Review)

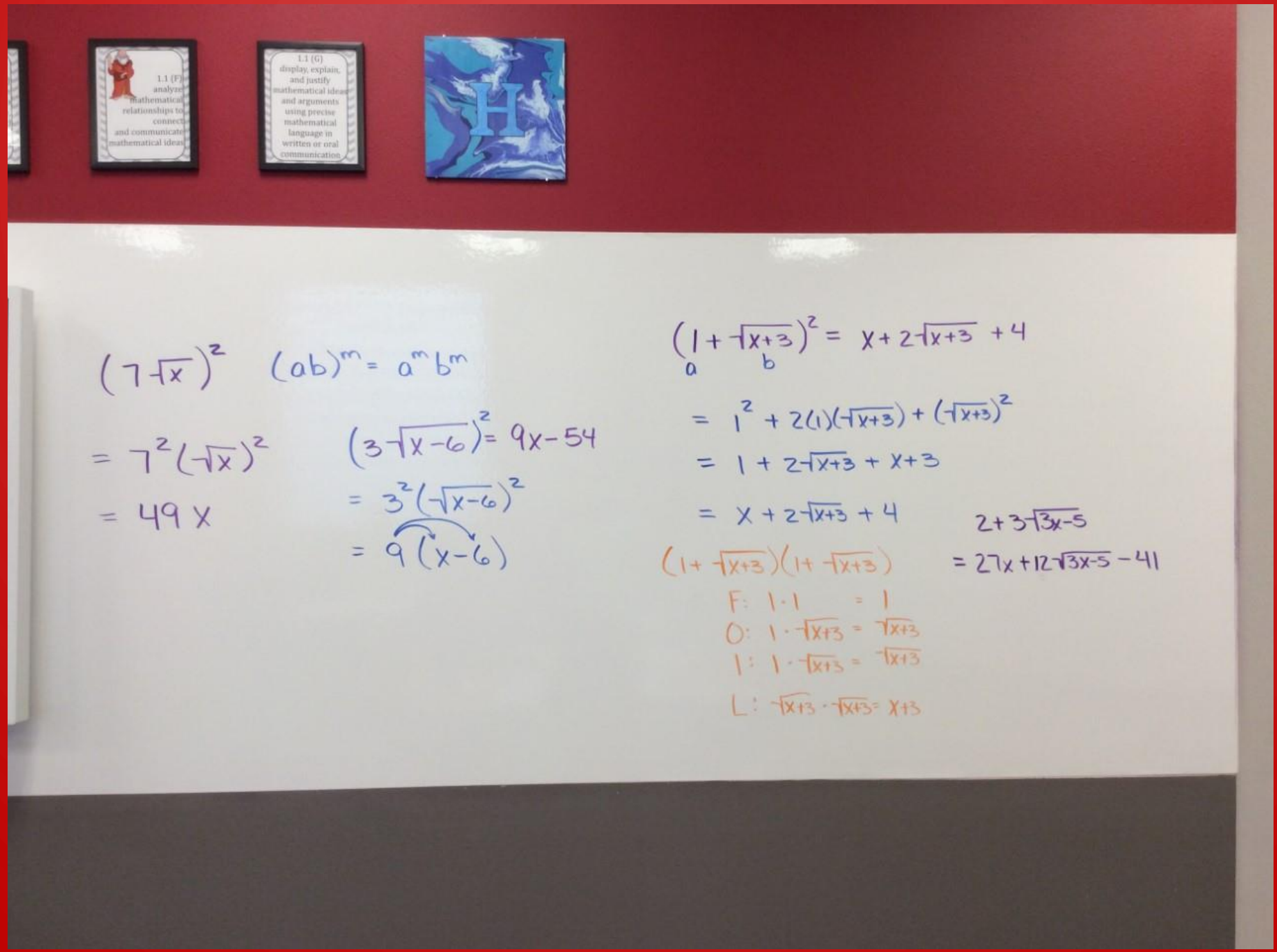
WHAT WE NEED:

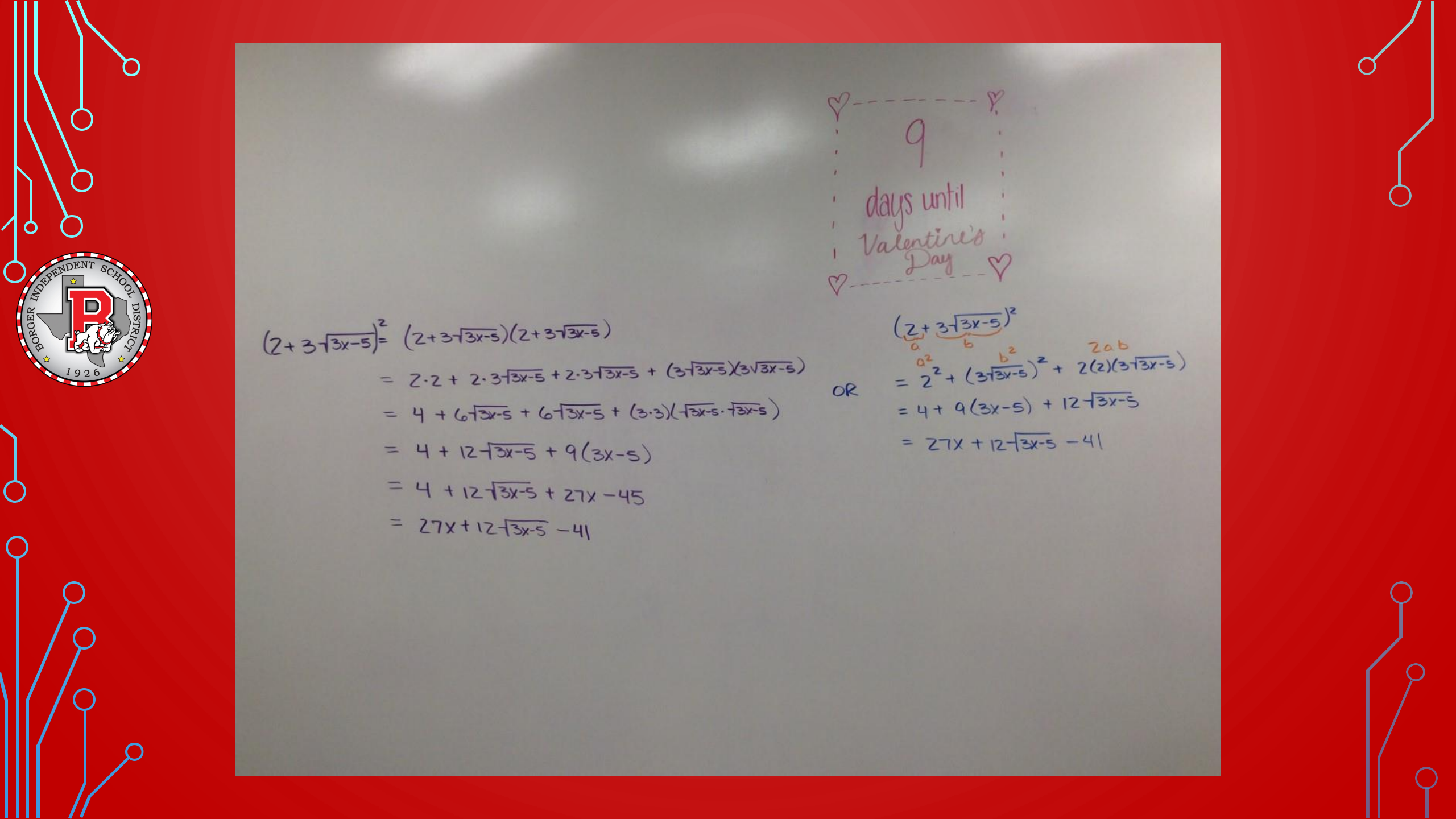
- TI-84

I WILL BE ABLE TO COMPLETE MY HOMEWORK GIVEN THE

- Equation


$(x-4)^2$
$= (x-4)(x-4)$
$= x^2 - 8x + 16$
$*(a-b)^2 = a^2 - 2ab + b^2$
$*(a+b)^2 = a^2 + 2ab + b^2$
$*(a-b)(a+b) = a^2 - b^2$
$(\sqrt{5})^2 = (5^{\frac{1}{2}})^2 = 5$


1.1 (F) analyze mathematical relationships to connect and communicate mathematical ideas
1.1 (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
H
$(7\sqrt{x})^2$
$(ab)^m = a^m b^m$
$= 7^2(\sqrt{x})^2$
$= 49x$
$(3\sqrt{x-6})^2 = 9x-54$
$= 3^2(\sqrt{x-6})^2$
$= 9(x-6)$
$(1+\sqrt{x+3})^2 = x+2\sqrt{x+3}+4$
a b
$= 1^2 + 2(1)(\sqrt{x+3}) + (\sqrt{x+3})^2$
$= 1 + 2\sqrt{x+3} + x+3$
$= x + 2\sqrt{x+3} + 4$
$(1+\sqrt{x+3})(1+\sqrt{x+3})$
F: $1 \cdot 1 = 1$
O: $1 \cdot \sqrt{x+3} = \sqrt{x+3}$
I: $1 \cdot \sqrt{x+3} = \sqrt{x+3}$
L: $\sqrt{x+3} \cdot \sqrt{x+3} = x+3$
$2+3\sqrt{3x-5}$
$= 27x + 12\sqrt{3x-5} - 41$


9
days until
Valentine's
Day
$(2+3\sqrt{3x-5})^2 = (2+3\sqrt{3x-5})(2+3\sqrt{3x-5})$
$= 2\cdot 2 + 2\cdot 3\sqrt{3x-5} + 2\cdot 3\sqrt{3x-5} + (3\sqrt{3x-5})(3\sqrt{3x-5})$
$= 4 + 6\sqrt{3x-5} + 6\sqrt{3x-5} + (3\cdot 3)(\sqrt{3x-5}\cdot\sqrt{3x-5})$
$= 4 + 12\sqrt{3x-5} + 9(3x-5)$
$= 4 + 12\sqrt{3x-5} + 27x - 45$
$= 27x + 12\sqrt{3x-5} - 41$
OR
$(2+3\sqrt{3x-5})^2$
a b
$a^2 + b^2 + 2ab$
$= 2^2 + (3\sqrt{3x-5})^2 + 2(2)(3\sqrt{3x-5})$
$= 4 + 9(3x-5) + 12\sqrt{3x-5}$
$= 27x + 12\sqrt{3x-5} - 41$