Practice problems:

Show how to model each of these with both integer chips and a number line. Please either label your chips with + and – or provide a key for which is + and which – if you are color coding. Integer chip subtraction should be shown with a take-away model, and integer chip division should be shown with a repeated sets (measurement division) model.

1. 5 + -7

2. 3 – 7

3. -2 – (-5)

4. 3 × (-4)

5. (-3) × 4

6. 8 ÷ (-2)

7. -8 ÷ (-2)

Show how to solve each of these problems with algebra tiles. Either label your tiles with + and – or provide a key for which is + and which – if you are color coding.

8. Expand: 3(5x-2)

9. Expand (2x-5)(3x+4)

10. Substitute: -3x+5, x = 4

12. Subtract and simplify: 

13. Divide: 

14. Factor: 

15. Factor: 

16. Solve: 4x + 14 = x + 2