**Solving Linear Equations with Algebra Tiles**

**KEY:**

 = positive number = positive variable

 = negative number = negative variable

Write the mathematical expression represented by each group of tiles.

1.2.3.

Model each expression below with your tiles. Then, draw a picture of what your tiles look like.

4. $x+1$ 5. $2b-3$ 6. $3g-5$

Write the equation represented by each group of tiles.

7. 8. 9.

Model each equation with your tiles. Then, draw a picture of what your tiles look like below.

10. –2*j* + 1 = 11 11. –6 = 4 – 5*x* 12. 7 = 2*w* – 1

Model each equation with your algebra tiles. Then solve each equation by making zero pairs and rearranging the groups as necessary. Check your solutions.

|  |  |
| --- | --- |
| 13. $x+5=-2$ | 14. $-3h-1=11$ |
| 15. Yellow Cab Company charges $7 for  picking you up and $2 per mile. How  many miles can you ride if you have $20? Identify the unknown:  Equation: | 16. Mary has 6 CD’s. If she has 7  less than John, how many CD’s  does John have? Identify the unknown:  Equation:   |