
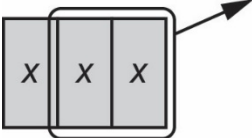
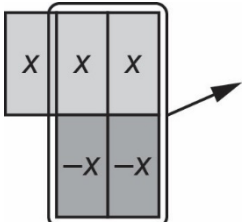


Patterns and Relations
Unit 1 Line Master 3c
Subtracting Polynomials Answers

1. a) 
- b)  $3x - 2x = x$
- c)  $3x + (-2x) = x$

- d) Subtracting a polynomial gives the same answer as adding the opposite polynomial.
 $3x - 2x = 3x + (-2x)$

2. a) $x^2 + (-6x) + 3$
 b) $-4x^2 + (-9)$

3. a) $2x^2 - 3x - 7$
 b) $-5x^2 + 3x - 3$

4. a) There was no $-x$ -tile to remove. By adding a zero pair, the $-x$ -tile can now be removed, leaving 6 x -tiles.
 b) $6x$
 c) $5x - (-x) = 5x + (+x)$
 $= 6x$

5. a) Sara wanted to add the opposite. The opposite of $3x$ is $-3x$ and the opposite of -6 is $+6$.
 b) Yes, Sara's answer is correct.
 c) $(-4m^2 - 5m - 6) - (-7m^2 + 3m - 1) = (-4m^2 - 5m - 6) + (7m^2 - 3m + 1)$
 $= 3m^2 - 8m - 5$