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| **Working with Monomials and Binomials** | | | |
| Interprets models of monomials  and binomials  “This design models (5*s* + 4*t*).” | Determines sums and differences  of monomials with whole-number  or integer coefficients  6*s* − (−2*s*)    “I modelled 6*s*. I didn’t have any  −*s-*tiles to take away, so I added  2 zero pairs. I took away 2 –*s*-tiles, leaving 8 *s-*tiles, or 8*s*.” | Determines sums of binomials with integer coefficients  (–3*x* + 4*y*) + (–2*x* – 3*y*)  “I need to model 2 different variables and positive and negative coefficients. I’m going to use algebra tiles and two-colour counters. When I combine tiles and counters, and remove zero pairs, I end up with  5 red *x*-tiles and 1 yellow y-counter. The answer is –5*x* + *y*.” | Solves applied problems involving the addition of binomials  Each side of an equilateral triangle has length (2*x* + 5) cm.  What is its perimeter?  “The perimeter is the sum of the  side lengths:  (2*x* + 5) + (2*x* + 5) + (2*x* + 5)  I can add the *x’*s and add the constants.  2*x* + 2*x* + 2*x* + 5 + 5 + 5  = 6*x* + 15  The perimeter is (6*x* + 15) cm. |
| **Observations/Documentation** | | | |
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