

Learning Outcomes Covered:

5D: I can simplify polynomials by combining like terms.

CONTENT Assessment Questions:

1. Use algebra tiles to model each polynomial, then combine like terms. Sketch the tiles for the simplified polynomial.

a) $4 + x + 1 + 5x + 1 = 6x + 6$

b) $-3y^2 + 3y - 2 = -3y^2 + 3y - 2$

c) $2x^2 + 8 - 11 - 4x^2 + 5x^2 = 3x^2 - 3$

d) $3y + 7y^2 + 1 - y - 2y - 3y^2 = 4y^2 + 1$

2. Simplify each polynomial.

a) $7d - 2d + 1 - 6 = 5d - 5$

b) $-5 - 3 - k - 5k = -6k - 8$

c) $-4 + 2a + 7 - 4a = -2a + 3$

d) $3a^2 - 2a - 4 + 2a - 3a^2 + 5 = 1$

e) $d^2 + 3d + 1 + 4d^2 + 2 = 5d^2 + 3d + 3$

f) $-6x^2 + 10x - 4 + 4 - 12x - 7x^2 = -13x^2 - 2x$

CURRICULAR COMPETENCIES Questions:

1. From the list, identify terms that are like $2w^2$. Explain how you know using words or pictures.
(CmRp)

$-5w, -6w^2, -2, 4w, 3w^2, -w^2, 11w, 2$

They all have the same variable & exponent

2. From the six expressions below, identify the equivalent polynomials. Justify your responses.
(CmRp)

a) $-5y^2 - 3y - 4$

b) $10x - 1$

c) $1 + x - x^2$

d) $2y^2 - 4 - 16 - 7y^2 - 3y + 16$

e) $-7 + 5x - 7x - 8 + 14 + 12x$

f) $5x^2 + 7 + 4x - 6x^2 - 6 - x - 2x$

d) $2y^2 - 4 - 16 - 7y^2 - 3y + 16$
 $= -5y^2 - 3y - 4$ (Same as a)

e) $-7 + 5x - 7x - 8 + 14 + 12x$
 $= 10x - 1$ (Same as b)

f) $5x^2 + 7 + 4x - 6x^2 - 6 - x - 2x$
 $= -x^2 + x + 1$ (Same as c)

ONGOING LEARNING ACTIVITIES:

CORE: Page 222: Curricular Competencies: 6, 9, 10, 18

Content: 8, (11, 12, 13, 14, 15) do at least 3 from each, 19

ADVANCED: Page 224: 20adf, 21, 22