

Lesson 8.1.4

8-39. See below:

- a. $(2x + 5)(x - 1)$
- b. $(x - 3)(x + 2)$
- c. $(3x + 1)(x + 4)$
- d. It is not factorable because no integers have a product of 14 and a sum of 5.

8-40. See below:

- a. explicit
- b. $t(n) = -3 + 4(n - 1)$ or $a_n = -3 + 4(n - 1)$
- c. $t(50) = a_{50} = 193$
- d. $t(n) = 3 - \frac{1}{3}(n - 1)$ or $a_n = 3 - \frac{1}{3}(n - 1)$

8-41. See below:

- a. In 7 weeks.
- b. Joman will score more with 1170 points, while Jhalil will have 970.

8-42. See below:

- a. Michelle is correct. One way to view this is graphically: The x -intercept always has a y -coordinate of 0 because it lies on the x -axis.
- b. $(-4, 0)$

8-43. 45, 46, 47; $x + (x + 1) + (x + 2) = 138$

8-44. See below:

- a. 2
- b. 3
- c. 1

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