CHAPTER 3 Polynomials
3.4 Communicate With Algebra
Terms and Polynomials

Example:

a) Consider the term $5xy^2$. Identify the coefficient and the variable part.

b) Mahmoud constructed a semicircular fish pond in his back yard. Write a term that expresses the area of the pond in terms of its radius r.

Solution:

a) The coefficient is 5. The variable part is xy^2.

b) The area of a circle of radius r is given by the expression πr^2. The area of the fish pond can be represented by the term $\frac{1}{2}\pi r^2$.

Practice:

1. The cost of insuring a boat can be represented by the term $100mp$, where m is the mass, in tonnes, and p is the purchase price, in dollars. Identify the coefficient part and the variable part.

2. An Islander light aircraft can be fitted with two or three engines. Each engine burns 64 L of fuel per hour of flight. Write a term that represents the total fuel burned in terms of the number of engines n and the number of hours flown h.

Answers:

1. coefficient: 100, variable: mp **2.** $64nt$