

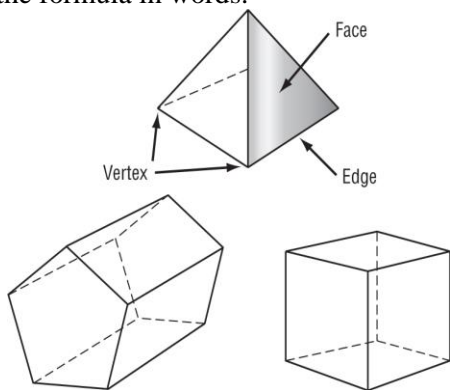
2-1 Word Problem Practice

Writing Equations

1. HOUSES The area of the Hartstein's kitchen is 182 square feet. This is 20% of the area of the first floor of their house. Let F represent the area of the first floor. Write an equation to represent the situation.

2. FAMILY Katie is twice as old as her sister Mara. The sum of their ages is 24. Write a one-variable equation to represent the situation.

3. GEOMETRY The formula $F + V = E + 2$ shows the relationship between the number of faces F , edges E , and vertices V of a polyhedron, such as a pyramid. Write the formula in words.



4. WIRELESS PHONE Spinfrog wireless phone company bills on a monthly basis. Each bill includes a \$29.95 service fee for 1000 minutes plus a \$2.95 federal communication tax. Additionally, there is a charge of \$0.05 for each minute used over 1000. Let m represent the number of minutes over 1000 used during the month. Write an equation to describe the cost p of the wireless phone service per month.

5. TEMPERATURE The table below shows the temperature in Fahrenheit for some corresponding temperatures in Celsius.

Celsius	Fahrenheit
-20°	-4°
-10°	14°
0°	32°
10°	50°
20°	68°
30°	86°

a. Write a formula for converting Celsius temperatures to Fahrenheit temperatures.

b. Find the Fahrenheit equivalents for 25°C and 35°C .