CONVERTING FRACTIONS, DECIMALS AND PERCENTAGES

To express one quantity as a percentage of another:

- write a fraction with the "part amount" as the numerator and the "whole amount" as the denominator.
- convert the fraction to a percentage by multiplying by 100%.

Example: express a test score of 14 out of 20 as a percentage.

$$\frac{14}{20} \times 100\% = \frac{14}{{}_{1}\cancel{20}} \times \frac{\cancel{100}^{5}}{1}\% = 70\%$$

CONVERTING FRACTIONS, DECIMALS AND PERCENTAGE

To find a certain percentage of a quantity:

- express the required percentage as a fraction
- change the "of" to a multiplication sign
- express the number as a fraction
- follow the rules for multiplication of fractions

Example: find 20% of 80.

$$20\% \text{ of } 80 = \frac{20}{100} \times \frac{80}{1} = \frac{^4\ 20}{_1\not{8}\ \not{100}} \times \frac{^4\ \not{80}}{1} = 16$$