ANSWERS

A) _____

B) _____

C) (_____ , _____)

A) The equation $2(Ax+2) = 3 - (Bx-1) + x$ is an identity, that is,
an equation true for <u>all</u> values of x. Compute the value of $2A + B + 3$.

B) $\dfrac{5}{8}$ of the students attending a school function are girls and $\dfrac{2}{5}$ of the students attending this
school function like to dance. After these students are joined by 20 more girls from another
school, all of whom like to dance, 75% of the students in attendance are girls. k percent of
the students now at this school function like to dance. Compute k.

C) The cost of a wedding banquet is the sum of a fixed cost F, which is the same regardless of
how many people attend, and a variable cost V, which depends on the number of people
attending. Assuming a charge of d dollars per person, the total cost of a banquet attended by
75 people is $4400, while the total cost of a banquet attended by 400 people is $18,050.
Compute the ordered pair (F, d).