1. **Write each of the following as an algebraic expression in one variable.**

a) 3 times a number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) a number increased by 4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) a number decreased by 3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) the length increased by 5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Tara’s age 2 years ago \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

f) Adam’s age 5 years from now \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

g) twice the width increased by 3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

h) one-half the speed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

i) the product of 6 and a number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

j) three times the volume decreased by 20 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

k) the value in cents of y dimes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

l) one-half Kent’s age 6 years ago \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

m) one-third of Johnny’s age, ten years from now \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

n) six times a number decreased by 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. **Write each of the following as an equation in one variable.**

a) A number increased by 35 is 82 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Five times a number is 185 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Four times a number less 47 is 293 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) When 57 is added to 9 times a number the result is 795. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Six times the number of students less 87 is 999. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

f) Gina’s age 5 years ago was 10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

g) Craig’s age thirteen years from now will be 27. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

h) Three times Jason’s age 5 years ago was 48. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

i) Five times Shawn’s age plus 13 is 163. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

j) Twice the length increased by 4 is 26. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

k) Three times the width decreased by 7 is 92. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

l) One half the length plus 11 is 43. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. **Write the following as algebraic expressions in two variables.**

a) The sum of the length and the width. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Twice the length added to three times the width. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Three times the length decreased by the width. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) The sum of Jeff’s age and three times Kyle’s age. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) The value of  nickels and dimes. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

f) The value of dimes and quarters. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

g) The value of loonies and toonies. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

h) Five times Mike’s age decreased by 4 times Bob’s age. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

i) Twice the length increased by 3 plus 4 times the width. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

j) Amanda’s age increased by 4 plus twice Jenn’s age. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. **Write each of the following as an algebraic equation in two variables.**

a) The sum of 2 numbers is 50. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) The difference between 2 numbers is 40. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) There are a total of 35 boys and girls in the class. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Sophia counted 8 more cars than trucks. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Jared’s history and English marks totalled 170. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

f) Twice one number plus three times another is 48. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

g) Four times the number of boys less twice the number of girls

is 33. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

h) The sum of Kim’s and Alison’s age is 32. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

i) Eight times Magda’s age plus JJ’s age 2 years ago is 251. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

j) The length plus 3 times the width is 48. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

k) Seven times the length less 5 times the width is 38. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

l) Five times the sum of two numbers is 60. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

m) The value of the dimes and quarters was 180 cents. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

n) The $10 bills and $5 bills had a total value of $765. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

o) Ten times Jessica’s age plus twice Stephen’s age is 170. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

p) Three times Jamie’s weight plus Chris’s weight is 540. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

q) Twice Rob’s French mark plus half his English mark is 203. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_