Section 4.5b – Modeling With Algebra

MPM1D

Part 1: Do It Now

Write an equation for each phrase:

a)   triple a number is 18   _____

b)   7 more than a number is 11   _____

c)   half a number is 10   _____

d)   double a number, less 3 is 7   _____

e)   5 less than one third a number is 1   _____

f)   2 more than triple a number is 14   _____

Part 2: Word Problems

When solving word problems,

- define the unknowns.
- write an equation to model the situation.
- solve the equation.
- answer the question asked in the problem.

1) The length of a rectangle is triple its width. The perimeter of the rectangle is 40 cm. What are the length and width?

2) Three consecutive integers have a sum of 75. What are the three integers?

3) Three consecutive even integers have a sum of 102. What are the three integers?

4) Katherine is 2 years older than Christine. The sum of their ages is 16. How old is each girl?