

Section 4.5b – Modeling With Algebra

MPM1D

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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?