



- 1) a) $x + 3 = 8$
 b) $x + 5 = 7$
 c) $x + 2 = 6$
- 2) $7 - 5 = x$ so $x = 2$
 $6 - 2 = x$ so $x = 4$
- 3) Open ended question. Check that the equations written match up to number riddles created.



- 1) Rhys has written a word problem that involved addition, the equation shows multiplication.
- 2) Yes, both equations show the same thing. However, the answer has been swapped to before the equals sign instead of after.
- 3) a) Rhys has created the equation $x \div 5 = 9$, so we can use inverse operations to find that the value of $x = 45$. Therefore Nishi has created the equation $45 + 15 = 60$. Nishi's answer is 60.
 b) It is not possible for Rhys and Nishi to start with the same positive number.
 The purpose of this question is to show that dividing by 5 will make a number smaller and adding 15 will make the number bigger.



- 1) The value of x in both equations is 6.
- 2) There are 10 possible values for x therefore 10 different equations:
 $53 - 20 = 33$
 $59 - 20 = 39$
 $61 - 20 = 41$
 $67 - 20 = 47$
 $71 - 20 = 51$
 $73 - 20 = 53$
 $79 - 20 = 59$
 $83 - 20 = 63$
 $89 - 20 = 69$
 $97 - 20 = 77$
- 3) $x + 8 = 10$
 $12 - x = 10$
 $5x = 10$
 $20 \div x = 10$
- 4) Open ended question. The purpose of the question is to get children to create one-step equations, however some might extend their learning to create two-step equations. Also, for this step children do not have to find the value of x in the equations, but children may choose to do this.