

PROBLEM SOLVING NOTES AND WORK HANDOUT 3

1. Think of a number.
2. Multiply it by 3.
3. Add 6.
4. Divide this number by 3.
5. Subtract the number from Step 1 from the answer in Step 4.

Do a few examples using arithmetic in order to figure out what happens.	Use algebra to figure out the structure of the problem.	Explain in words why this works the way it does.

1. Pick the number of times a week that you would like to eat something chocolate — more than once but less than 10.
2. Multiply this number by 2 (just to be bold).
3. Add 5.
4. Multiply it by 50. Go ahead, use a calculator if you want.
5. If you have already had your birthday this year add 1769. If you haven't, add 1768.
6. Now subtract the four digit year that you were born. You should have a three digit number.

Do a few examples using arithmetic in order to figure out what happens.	Use algebra to figure out the structure of the problem.	Explain in words why this works the way it does.

- 1 Pick any positive integer.
- 2 Double it.
- 3 Add 10.
- 4 Divide by two.
- 5 Subtract the number you started with in Step 1.

Do a few examples using arithmetic in order to figure out what happens.	Use algebra to figure out the structure of the problem.	Explain in words why this works the way it does.

1. Think of any three-digit number in which each of the digits is the same. Examples include 333, 666, 777, 999.
2. Add up the digits.
3. Divide the three digit number by the answer in Step 2.

Do a few examples using arithmetic in order to figure out what happens.	Use algebra to figure out the structure of the problem.	Explain in words why this works the way it does.

WHO IS YOUR ROLE MODEL?

- 1) Pick a number between 1 and 9.
- 2) Multiply by 3
- 3) Add 3 and then multiply by 3 again
- 4) Your answer should be a two or three digit number. Add the digits together.
- 5) Look on the back side of this page. The person next to the number you selected is your role model.

Do a few examples using arithmetic in order to figure out what happens.	Use algebra to figure out the structure of the problem.	Explain in words why this works the way it does.

- 1 Einstein
- 2 Nelson Mandela
- 3 Abraham Lincoln
- 4 Helen Keller
- 5 Bill Gates
- 6 Gandhi
- 7 George Clooney
- 8 Thomas Edison
- 9 Heidi Meyer
- 10 Diana, Princess of Wales
- 11 George W. Bush
- 12 Jesse Owens
- 13 Barack Obama
- 14 Guy Fieri
- 15 Sir Isaac Newton