1. Which of the following numbers are divisible by 3? By 9? By 11? Or are prime?

  a) 51

  b) 307

  c) 333

  d) 47

  e) 1368

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2. Draw the line a and mark points A, B, C, D, K on the line a so that

  a. Point C belongs to the segment $\overline{AB}$;

  b. Point D belongs to the ray $\overrightarrow{AB}$ and doesn't belongs to the segment $\overline{AB}$;

  c. Point K belongs to the ray $\overrightarrow{BA}$ and doesn't belongs to the segment $\overline{AB}$;\

3. Place parentheses into the following expression so that the statement is true.

     a) $96-12*6:3=8$

     b) $64:64-8*4=2$

     c) $63:9+54=1$

4. Solve the following equations:

$a.\ 3z - 11 = 16$ $b.\ 62 + 2y + 5 = 81$ $c.\ 101 - 4x = 21$

$d.\ 2x - 23 = 21$ $e.\ 26 + 3y = 5$ $f.\ 4z + 7 = 39$

7. Simplify:

a) $1 \text{ m} + 8 \text{ m} - 5 \text{ m} =$

b) $6x + 2x + 9x - 12 =$

c) $7x + 3 - 5x + 7 =$

d) $3 + 9x + 2xy - 4x =$

e) $3yz - 2z + 5yz + 8y =$

f) $34a - 10a + 8b - 2b +$

$2ab =$

8. On the first shelf there are 5 more books than on the second shelf and 5 less books than on the third shelf. There are 105 books altogether. How many books are there on each shelf? (Write an equation to solve the problem.)