1. simplify 6y + 3x + 5y - 4x

   SOLUTION

   Assume y is an apple so I have 6 apples and 5 apples, so I have 11 apples, 11y.

   Assume x is a dollar, so I have 3 dollars but I have to pay 4 dollars, as a result I still need to pay one more dollar, -x.

   The final answer is

Answer: 11y - x

2. solve for n $\frac{n+1}{4} = 1/2$

   solution:

   since there are fractions, then I have to perform cross multiplication:

   2(n+1)= 4

   I need to get rid of the 2, I can divide both sides by 2 to get:

   (n+1)=2 which is n+1 = 2

   Now I need to get rid of number 1, I can subtract 1 from both sides to get

   n +1 -1 = 2 -1

   finally n =1

n= 1

3. Which is divisible by 6? Circle your answer(s)
   a. 282
   b. 384
   c. 512
   d. 114

   Solution:

   The **divisibility rule of 6** states that a number is said to be divisible by 6 if it is divisible by 2 and 3 both.

   Divisibility rule of 2, all even numbers are divisible by 2.

   Divisibility rule of 3, if the sum of the digits is divisible by 3.

   In our problem, all the options (282, 384, 512, and 114) are even numbers, we go to check divisibility for 3.

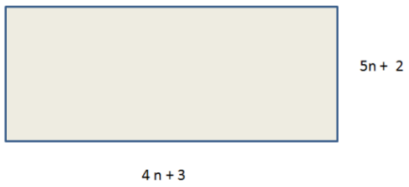
   Option a 282 the sum of the digits is 2+8+2=12 which is divisible by 3, so 282 is divisible by 6.

   The sum of 384 is 3+8+4 = 15 also divisible by6.

   The sum of 512 is 5+1+2 =8, but 8 is NOT divisible by 3, so 512 is not divisible by 6.

   You try to do 114.

4. Which of these is the correct PERIMETER of the rectangle? Circle your answer(s):
   a. 19n
   b. 18n+10
   c. 2 +n
   d. 16n+8



Solution:

The perimeter P = L+L+w+w , where L is the length of the rectangle and w is the width.

P = 4n+3 + 4n+3 + 5n+2 + 5n+2

P = 4n+4n+5n+5n + 3+3+2+2

P = 18n +10

5. if x = -2 arrange the following expressions (biggest on top)
   1-x x+1 2x+13 x+10

   Solution:
   We have to substitute first, then see which number is bigger,
   1-x = 1- (-2) = 1+2 =3
   X+1 = -2 +1 = -1
   2x+13 = 2(-2) +13 = -4+13 =9
   X+10 = -2+10 = 8
   Obviously we can see that the biggest number is 9, then 8, then 3 and the lowest is -1.

6. Fill in the blank:
   6x + 18 = 2 (3x + …….)

   Solution:
   Here we need to factorize, so easy to see that 6 = 2x3 and we have to see also
   18 = 2x9
   So the missing number is **9.**

7.

Find the value of X?

5x - 2 = 3x

Solution:

First we need to put the unknowns in one side and the numbers in the other side,

5x – 3x = 2 , I just add 2 to both sides, and subtract 3x from both sides.

Now simplify to get

2x = 2.

Lastly, divide both sides by 2 to get:

X = 1.

8. Solve for x?

3x – 9 = 3

Solution:

Follow the steps in problem number 7, to get

X = 4