

# S.M.ART School MBB3 HW due 10-19-2024



Find values of  $x$ , so that the following statements are true

E1 
$$11*(x - 3) / 3 + 8*(2x - 1) / 4 = 5/12$$

E2 
$$11*(x - 3) / 3 - 8*(2x - 1) / 4 = 5/12$$

E3 
$$12*x / 7 - (3 - x) / 3 = 1/42$$

W1 Al and Bob had \$444 each. How much money did Al give to Bob if now Bob has 5 times what Al has?

W2 A sport club has a ratio of girls to boys of 13 to 4. The club has a total of 510 members. What is the difference between the number of girls and the number of boys?

dreamstime



P1 A store usually sells a certain item at 60% profit. One week the store has a sale, during which the item is sold for 20% less than usual price. During the sale, what is the percent profit the store makes on each of these items?

P2 Originally, a camera was priced at N dollars. After the discount it was 120 dollars. What is percentage of the discount?

P3 What % of 60 is 300 ?

P4 What % of 300 is 60?

P5 What % of n is 300?

P6 What % of A is B?

P7 Bank pays 3% annual interest. My account increased \$60 for the year. How much do I have now on my account?

## Distributive Property

$$a*x + a*y = a*(x + y) \quad \leftarrow \text{Factor, or Undistribute, or Create Parenthesis}$$

$$a*(x + y) = a*x + a*y \quad \leftarrow \text{Distribute, or Expand, or Open Parenthesis}$$

### Factor

$$F1 \quad a * y^2 * x + a * x$$

$$F2 \quad N^2 - N*b^2$$

$$F3 \quad b*N^2 - N^3*b^2$$

$$F4 \quad 18 * a - 27 * a * b^2$$

$$F5 \quad 28 * a^2 * b + 21 * a * b^2$$