

S.M.ART School MBB2 HW due 03-04-2025

A1 Arithmetic average of seven numbers is 120. First three of them have average 60. What is the average of the other four?

W1 There are 324 marbles in the bag. $\frac{3}{4}$ of them is green, $\frac{2}{9}$ is red. The rest is blue ones. How many blue marbles are there?

W2 Length of a rectangle is 14 ft. Area is 224 ft^2 . Find perimeter of the rectangle.

We already know that for any real numbers X, Y

$$(1) \quad (X + Y)^2 = X^2 + 2*X*Y + Y^2$$

$$(1A) \quad (X - Y)^2 = X^2 - 2*X*Y + Y^2$$

$$(2) \quad X^2 - Y^2 = (X - Y) * (X + Y)$$

Factor, and then compute

L1 $137^2 - 135^2 =$

L2 $0.137^2 - 0.135^2 =$

L3 $291^2 + 9^2 + 2*9*291 =$

L4 $291^2 + 91^2 - 2*91*291 =$

Q1 How many yards of carpet that is 444 inches wide is needed to cover a floor that is 16' by 37'?

Q2 A motorist goes 120 miles in 150 min. How far does he go in 4.5 hours?

Q3 A motorist goes 120 miles in N min. How far does he go in 4.5 hours?

Q4 If a man can run N miles in 16 minutes. How long will it take him to run 36 miles at the same rate?

E1 Solve equation $(3x + 5) / (5x - 3) = 1/4$

B1 A tailor has a roll of silk 20 yards long. He must cut off 5 feet from one side and 24 inches from the other. How many inches of silk will he have left?

B2 A tailor has a roll of silk M yards long. He must cut off N feet from one side and K inches from the other. How many inches of silk will he have left?

Open parenthesis

$$C1 \quad (x - 1) * (3*x + 5)$$

$$C2 \quad (3*x - 11) * (3*x - 11)$$

$$C3 \quad (3*x - 11) * (3*x + 11)$$