

S.M.ART School

MAB1

Homework

due 10-29-202

First, find Smallest Common Denominator (which is also Smallest Common Multiple in this context) and combine ratios

C1
$$2x/21 - x/28$$

C2
$$x/4 - x/8 + x/12 + x/16$$

G1 Area of the kitchen is $\frac{3}{11}$ of area of the living room; that is why they needed 72 sq. yards less to cover the floor of the kitchen than to cover the floor in the living room? What is the area of the living room?

A1 On a map of a certain country 6 inches represent 200 miles. How many miles does one 3 feet represent?

W1

A store sold $\frac{1}{3}$ of a shipment of raisins one day and $\frac{1}{2}$ the next day. What fraction of the shipment did the store sell over the two days?

W2

Neil read $\frac{5}{9}$ of a book one day and $\frac{1}{6}$ less than this the next day. What fraction of the book did Neil read the second day? Did he finish the book in two days?

W3

A group of hikers walked $3\frac{7}{10}$ km one hour and the same distance plus $1\frac{1}{5}$ km the next hour. How far did the hikers go in two hours?

W4

A crate loaded with apples weighs $23\frac{9}{10}$ kg. If the same crate weighs $1\frac{1}{2}$ kg when empty, how much do the apples weigh?

W5

Fran went to a symphony concert and was gone $4\frac{5}{6}$ hours. If she spent a total of $1\frac{2}{3}$ hours getting there and back, how long was Fran at the concert hall?

W6

A cow gave $8\frac{1}{2}$ liters of milk in the morning, $\frac{3}{5}$ liters less than this at the noon milking, and $6\frac{3}{10}$ liters in the evening. How many liters of milk did the cow give for the entire day?

W7 24 yards is X times longer than 60 inches. How much is X?

Solve equations

E1 $8*(x - 2) = 5*x - 12$

E2 $8*(x - 2) = 5*x + 12$

E3 $8*(x + 2) = 5*x + 12$

E4 $13*x - 3/7 = 11*x - 5/14$

Compute

S1 $0.015 / 0.45 =$

S2 $0.27 / 0.55 =$

S3 $1.44 / 0.024 =$

S4 $5.1 / 0.34 =$

First, find Smallest Common Denominator (which is also Smallest Common Multiple in this context) and combine ratios

C1 $12x/35 - 5x/49$

C2 $x/3 - x/6 + x/9 + x/12$

G1 Area of the kitchen is $4/9$ of area of the living room; that is why they needed 55 sq. yards less to cover the floor of the kitchen than to cover the floor in the living room? What is the area of the living room?

G2 Area of the kitchen is $5/9$ of area of the living room; that is why they needed 56 sq. yards less to cover the floor of the kitchen than to cover the floor in the living room? What is the area of the living room?

Compute

S1 $0.04 / 0.24 =$

S2 $0.36 / 0.81 =$

S3 $1.21 / 0.011 =$

S4 $12.1 / 0.11) =$

Determine value of x

D1 $24.78 * 10^2 = x$

D2 $x * 2.478 = 2,478$

D3 $2.478 / x = 2,478$

D4 $x / 10^3 = 24.78$

D5 $x * (1/5) - x * (1/6) = 1/30$

D6 $x/5 - x/6 = 1$

W1 How much snow will fall in 7.5 hours if it falls at a rate of 2.5 feet per 15 minutes?

W2 A jar is filled up to $\frac{11}{14}$ of its capacity. Then Jesse adds 18 more gallons to the jar. The jar now is filled up. What is the capacity of the jar?



W3 How much time (in seconds) is saved for 3 miles if we go with the speed 80 mph instead of 60 mph?

Compute using the most efficient way (no calculator)

M1 $0.125 * 16 = (1/8) * 16 = 16 / 8 = 2$

M2 $(225 / 49) * (21 / 125)$

M3 $(74 / 625) * (225 / 111)$

M4

$$\left(\frac{3}{4}\right) * \left(\frac{4}{5}\right) * \left(\frac{5}{6}\right) * \left(\frac{6}{7}\right) * \left(\frac{8}{9}\right)$$