Example Problems for the Landscape

I need to drink 8 ½ cups of water every day. So far today I have drank $3\frac{4}{5}$ cups of water. How many more cups should I drink by the end of the day?

[Obj. 5, Subtraction-Completion, requires regrouping]

Bill’s car gets 24 miles per gallon (mpg) for gas mileage. Bill’s truck gets 18.37 mpg. How many more miles per gallon does the car get compared to the truck?

[Obj. 6, Subtraction-Comparison, one decimal is “shorter”]

We have $\frac{9}{16}$ cups of hot chocolate mix. Each serving requires $\frac{1}{8}$ per cup. How many servings (cups) can we make? State the answer as a mixed number in lowest terms.

[Obj. 13, Division-repeated subtraction, involves simplification]

We go 154.5 miles on 7.5 gallons of gas. Find the miles per gallon.

[Obj. 14, Division-fair division, requires an embedded zero in the quotient]

The cost of 0.12 oz. of perfume is $24. What is the cost per ounce?

[Obj. 14, Division-fair division, division terminates “too soon”]

 We have 78 million dollars budgeted this year for TV advertising. If each TV advertising contract is 1.3 million dollars, how many advertising contracts can we buy?

[Obj. 14, Division-repeated subtraction, division terminates “too soon”]

If the field is three-quarter miles by one and a half miles, find the area of the field.

[Obj. 11, Multiplication-arrays (area), combination of mixed and proper-no simplification]

The Facebook Group had an increase of 560 people join the group from September to October. There is now a total of 910 people. What is the percent change?

[Obj. 16, New amount and amount of change given, percent change greater than 100%]