Simplify all answers and show your work! Solutions having an answer only or where the work does not match up with the answer will be marked wrong. This is not a test of your ability to guess or work a calculator.

1. Add: 3.46 + 54.3 + 21
2. Multiply: \[
\frac{32.7}{5.9}
\]
3. Divide: \[
\frac{1.28}{1.6}
\]

4. Write as a decimal: \[
\frac{13}{20}
\]
5. Simplify: \[
2.4 ÷ 0.6 + 5.1^2 − 6.8
\]
6. Solve for \(x\): \[
\frac{4\frac{1}{2}}{6} = \frac{x}{8}
\]

Write the following rates or ratios in lowest terms.

7) 2 days to 4 weeks
8) $36 to $9
9) 150 miles on 6 gallons

10. The odometer on a car read 13,823.4 miles at the beginning of a roundtrip drive to Atlanta from Columbia. After returning from Atlanta, the odometer read 14,264.8 miles. How far was the drive one way?

11. What is the cost of filling up a 14.5 gallon gas tank if gasoline costs $2.07 a gallon?

12. A 20-foot truck rents for $79.99 per day plus $0.49 per mile. If you rent a truck for 3 days and travel 257 miles, what is the total rental cost?

13. If 11 gallons of shampoo cost $24, what is the cost per gallon? (Round to the nearest cent.)
14. You get a 1.69-ounce bag of M&M’s for Halloween! If there are 55 M&M’s in your bag and 14 of them are red, how many red M&M’s would you find in a jar of 500 M&M’s? (Round to the nearest M&M.)

15. The cost of 50 medicine vials is $87.50. How many medicine vials can be purchased with $525?

16. A 30-ounce jar of popcorn costs $2.39. What is cost per ounce?

17. A box of 100 Advil costs $7.99, while a box of 165 Advil costs $11.99. Which is the better buy?

18. June has a strip of fabric 38.4 inches long. She wants to cut it into strips that are 4.8 inches long. How many 4.8-inch strips will she get from the fabric?

19. If 1 inch on a blueprint represents 8 inches of actual length, what is the actual length of a table leg measuring \(5 \frac{1}{2}\) inches on the blueprint?

20. Hanu’s outdoor grill uses 2.4 pounds of propane per hour. If the tank holds 19.2 pounds of propane, how many hours can the barbecue run on a full tank?