Simplify all answers and show your work!

1. Round to the nearest hundred: 458,984  
2. Round to the nearest ten thousand: 75,911

3. Division is a shortcut for repeated _________________.
4. ____________________ is a shortcut for repeated multiplication.
5. What operation represents a shortcut for repeated addition? ________________
6. The denominator of a fraction tells us _____________________________________________.
7. Use front end rounding to estimate the problem 1438 + 864 + 28 ________________________________.

Simplify the following.

8. \(4^3\)  
9. \(\sqrt{64}\)  
10. \(4(3 + 7) - \sqrt{81} \div 3\)  
11. \(2 + 10 \div 2 \cdot 5 - 8\)

12. Find the prime factorization of 60.

13. Draw a picture that represents \(2 \frac{2}{3}\).  
14. Write \(\frac{5}{9}\) as an improper fraction.

15. Write \(\frac{47}{8}\) as a mixed number.  
16. Write \(\frac{24}{36}\) in lowest terms.

17. Determine whether the following two fractions are equivalent or not equivalent: \(\frac{12}{20}, \frac{21}{35}\)

18. This month, Kerry made deposits of $256, $825, and $487 into the checking account at the store he owns, which already had a balance of $4265 before he made the deposits. If he wrote checks for $1500, $526, and $38 after all deposits were made, what was his balance after all of these transactions had taken place?
19. A classroom is set up with 5 rows of tables where each row of tables is holding 6 computers. In addition, there is a computer at the front of the classroom for the instructor’s use. How many computers are in the classroom?

20. A bag of potato chips contains 336 grams. If one serving is 28 grams, how many servings are there in the bag of potato chips?

21. A liquid medication is dispensed to a patient at 30 mL four times a day for a two-week period. How many mL does the patient take over that two-week period?

22. One weekend, Jamal drove 155 miles one way to a conference in Atlanta and then returned home two days later. The next weekend, he drove 90 miles one way to a conference in Columbia and then returned home the next day. How many fewer miles did he travel on the trip during the second weekend than on the trip during the first weekend?

23. A class with 24 people in it has 16 women in the class.  
a) What fraction of the class is a woman?  
b) How many people in the class are not women?  
c) What fraction of the class is not a woman?

24. The ideal weight for a man can be found like so: Ideal Weight = height (in inches) x 4 -130  
What is the ideal weight for a man who is 72 inches tall?

25. Add:  \( \frac{7}{12} + \frac{1}{12} \)  

26. Subtract:  \( \frac{7}{8} - \frac{3}{8} \)