

M006
Practice Exam I

1. Write the following numbers in words. (*Section 1.1*)

a) 6,107 _____

b) 94,428 _____

2. Perform the indicated operation. (*Sections 1.2, 1.3, 1.4, and 1.5*)

a)
$$\begin{array}{r} 5,672 \\ 98 \\ + 756 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 20,010 \\ - 9,762 \\ \hline \end{array}$$

c) $9 \times 13 \times 3 =$

d) $13,862 \div 29 =$

3. Round the number 67,509 to the nearest: (*Section 1.7*)

a) ten _____

b) hundred _____

c) thousand _____

d) ten thousand _____

4. Work each problem using the order of operations. (Section 1.8)

a) $3 + 5^2 \times 2$

b) $28 - 3 \cdot 2^3 + 4 \cdot \sqrt{25}$

5. A movie theatre collects 109 adult tickets at \$5 each and 143 tickets for children at \$4 each. Find the total amount of money collected. (Section 2.6)

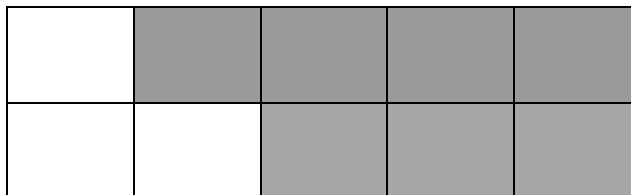
6. If an acre needs 250 pounds of fertilizer, how many acres can be fertilized with 5,750 pounds of fertilizer? First estimate the answer, then find the exact answer. (Section 2.8)

a) Estimate _____

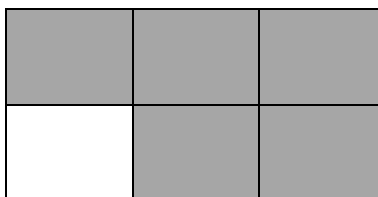
b) Exact _____

7. Use a fraction to represent the shaded portions. (Section 2.1)

a) _____



b) _____



8. For the number 96: (Section 2.3)

a) List all the factors. _____

b) Write the prime factorization. _____

9. Perform the indicated operation. Write answers in lowest terms. (Section 2.5)

a) $18 \cdot \frac{5}{6} =$

b) $\frac{6}{7} \div \frac{9}{10} =$

10. If 20 cups of syrup are poured into $\frac{4}{5}$ cup containers, how many containers can be filled? (Section 2.7)

11. Perform the indicated operation. First estimate the answer, then find the exact answer. (Section 2.8)

a) $4\frac{1}{8} \cdot 3\frac{2}{3} =$

Estimate _____

Exact _____

b) $5\frac{3}{4} \div 2\frac{1}{5} =$

Estimate _____

Exact _____

12. If elephant grass grows $2\frac{1}{2}$ inches a day, how long will the grass grow in 5 days? (Section 2.8)

13. Explain in your own words the difference between like fractions and unlike fractions. (Section 3.1)

14. Perform the indicated operation. Write answers in lowest terms or as mixed numbers.
(Sections 3.1, 3.3, and 3.4)

a) $\frac{7}{9} + \frac{1}{9} =$

b) $\frac{4}{5} - \frac{3}{4} =$

c) $24\frac{5}{6} + 18\frac{5}{6} =$

d) $7\frac{1}{4} - 4\frac{2}{3} =$

15. In your own words, write a definition of a prime number. Give two examples of a prime number.
(Section 2.3)

16. Find the least common multiple of each set of numbers. (Section 3.2)

a) 8, 10, 12 _____

b) 8, 10, 12, 16 _____

17. At birth, the Bolton triplets weighed $5\frac{3}{4}$ pounds, $4\frac{7}{8}$ pounds, and $5\frac{1}{3}$ pounds. Find their total weight. (Section 3.3)

18. Write $<$ or $>$ to make a true statement. (Section 3.5)

a) $\frac{3}{4}$ _____ $\frac{13}{18}$

b) $\frac{11}{12}$ _____ $\frac{8}{9}$

19. Tanya takes a $16\frac{1}{2}$ foot log and cuts off two pieces. If one piece is $2\frac{3}{4}$ feet long and the other is $3\frac{1}{8}$ feet long, how long is the remaining piece? (Section 3.4)

20. Simplify by using the order of operations. (Section 3.5)

a) $\frac{2}{3} + \frac{1}{4} \cdot \frac{5}{6} =$

b) $\left(\frac{2}{3} + \frac{1}{4}\right) \cdot \frac{5}{6} =$

Extra Credit (Worth 5 Points) (Section 3.5)

Mary received a check for \$1,200. After paying $\frac{3}{8}$ of this amount for room and board, she paid $\frac{1}{2}$ of the remaining amount for school fees. How much money does she have left after paying the fees?