Take Home Exam for Thanksgiving

November 17, 2017
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Due Date: Tuesday November 28, 2017

1. Evaluate the following expressions:
   (a) $18 - 9 - 6 =$
   (b) $6 + 10 \div 2 =$
   (c) $8 \div 2 \cdot 4 =$
   (d) $4 + 12 \div 4 \cdot 5 =$
   (e) $2(18) + 11(23) =$
   (f) $45 - 11(2) =$
   (g) $2 \times 2^3 + 11 \times 18 =$
   (h) $5 - 3(15 - 2 \cdot 5) =$
   (i) $8^2 - 45 \div 3^2 \cdot 4 - 7 =$
2. Perform the following operations:
   (a) $5 - 12 =$
   (b) $-8 - 3 =$
   (c) $-7 - (-8) =$
   (d) $17 - (-15) =$
   (e) $-16 - 14 =$
   (f) $-21 - (-27) =$
   (g) $10 - 35 =$
   (h) $-26 - (-12) =$
   (i) $(-2)(1)(-5) =$
   (j) $\dfrac{-220}{-20} =$
   (k) $\dfrac{36}{-6} =$
   (l) $\dfrac{-56}{9} =$
3. Evaluate. Write the answer in the simplest form. $\dfrac{13}{9} - \left(\dfrac{8}{3} - \dfrac{5}{3}\right)$
4. Change to improper fractions:
   (a) $6\dfrac{1}{2} =$
   (b) $9\dfrac{1}{3} =$
   (c) $2\dfrac{7}{13} =$

5. Change to mixed numbers:
   (a) $\frac{59}{8} =$
   (b) $\frac{64}{13} =$
   (c) $\frac{187}{16}$
6. List the following fractions in order from largest to smallest: $\frac{2}{5}, \frac{8}{15}, \frac{16}{21}$
7. Perform the following operations. Your answer should be a fraction if the question involves fractions, or a mixed number if the question involves mixed numbers.
   (a) $\frac{1}{2} + \frac{7}{8} =$
   (b) $4\frac{2}{9} - 3\frac{1}{7} =$
   (c) $2\frac{1}{7} \times 1\frac{2}{9} =$
   (d) $\frac{1}{2} \div \frac{1}{7} =$
   (e) $\frac{2}{5}(-\frac{5}{6})(\frac{8}{11}) =$
8. Perform the following operations:
   (a) $57.1 + 69.33 =$
   (b) $5.07 - 7.195 =$
   (c) $.296 \div 2.4 =$
   (d) $.6 \times 4.17 =$
   (e) $.3 \times 0.07 =$
   (f) $.065 \times 2.4 =$
9. Perform the following divisions. Give you answer as terminating or repeating decimal:
   (a) $76 \div 16 =$
   (b) $16 \div 76 =$
   (c) $100 \div 18 =$
   (d) $23 \div 7 =$
10. Perform the following divisions, If necessary, round your answer to the nearest hundredth.
    (a) $10 \div 17 =$
    (b) $57 \div 21 =$
    (c) $123 \div 11 =$
    (d) $2348 \div 17 =$
11. On a test, Jose answers $\frac{5}{6}$ of the problems correctly. If there were 72 problems on the test, how many did he get correct?

12. Solve the following proportions:
    (a) $\frac{5}{3} = \frac{x}{12}$
    (b) $\frac{7}{x} = \frac{28}{20}$
13. John bought 4 books for $\$32$. How much do 6 books cost?
14. What number is 14% of 37?
15. 131 dollars is 16% of what amount?
16. Solve the linear equation $5x = 38$.
17. 19 is what percent of 50?
18. Over four years the price of a car decreased to $\$17,500$, which is 70% of the original price. What was the original price of the car?
19. Angela gets a 11% raise. Her new salary is $\$38,100$ per year. What was her old salary?
20. Find:
    (a) $\frac{5}{2}$ of 24.
    (b) 0.69 of 87.
    (c) 38% of 160.
21. Luis left a 20% tip at a restaurant. If the tip he left was $\$24$ how much was the bill?