Evaluate the expression in problems 1-10. Each of these is worth 2 points.

1. $15(-7)$

2. $20 - (-14)$

3. $-15 + 8$

4. $40 \div (-8)$

5. $3 - 5 + 8 - 6 - 2$

6. $\dfrac{5(-18)}{9}$

7. -9^2

8. $6 - 3(8 - 11)$

9. $\dfrac{8-(-2)}{-10+(-8)}$

10. $\dfrac{27-4\sqrt{9}}{3}$

For the rest of the exam, problems are worth 5 points each

11. Compute
   (a) $501{,}328 - 496{,}578$

   (b) $6912 \div 36$

12. Compute and express the result in lowest terms
   (a) $\dfrac{2}{15} + \dfrac{4}{9}$

   (b) $\dfrac{12}{13} \div \dfrac{15}{11}$

13. List the following fractions in order from smallest to largest: $\dfrac{8}{15}, \dfrac{3}{5}, \dfrac{13}{24}$

14. Compute and express the result as a mixed number
   (a) $5\dfrac{2}{3} - 3\dfrac{1}{5}$

   (b) $2\dfrac{3}{4} \times 3\dfrac{2}{3}$

15. Solve the proportion: $\dfrac{8}{9} = \dfrac{6}{x}$

16. Find:
    (a) The GCF of $\{48, 60\}$

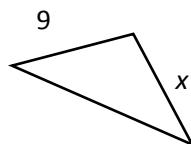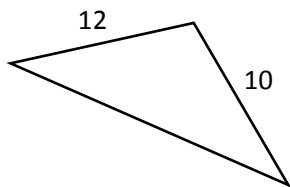   (b) The LCM of $\{15, 50\}$

17. Compute
    (a) 8.3×6.14

    (b) $5.13 \div .15$

18. Express 0.03 as a percent.

19. A 50 mile trip requires 4 gallons of gas. How much gas will be needed for a 220 mile trip? Give your answer as a decimal. If necessary, round to the nearest tenth of a gallon.

20. Given that the two triangles are similar. Find x.

12   9

10   x

21. 20% of a number is 16. What is the number? If necessary round your answer to one decimal place.

22. In a class of 40 students 35 pass the final exam. What percentage pass the final exam?

23. Evaluate: $2x^2 - 3x - 9$, if $x = -3$

24. Given $C = \frac{5}{9}(F - 32)$, Find C, if F=59

25. Solve for x: $3x - 17 = 10$

26. The hypotenuse of a right triangle is 10 feet long. If one of the legs is 8 feet long, what is the length of the other leg?