Upcoming 6th Grade
Summer Math Work

Name: _____

Work as hard as you can on these problems. You need to attempt every one of them. If there is a problem you encounter that you do not remember how to work, then please do the following:
  a. Write in words everything you know about the problem.
  b. Think about things that you think might work.
  c. Come up with a reasonable estimation or guess.
  d. Don't worry! We can review these problems.
  e. TRY YOUR BEST.
  f. Don't be afraid of mistakes - we learn the most from mistakes.

Convert from a fraction to a decimal. Round to the nearest thousandth if necessary.

1. ¾   2. ⅝

Convert from a decimal to a fraction. Leave answer in simplest form.

3. 0.45   4. 0.6

Convert from a fraction to a percent.

4. ½   5. ⅘

Add or subtract the following fractions. Leave answer in simplest form.

6. ⅚ + ⅔   7. ⅘ - ¾

8. 3½ + 7⅔   9. 12¾ - 5⅘

Multiply the following fractions. Leave answers in simplest form.

10. 5/9 x 6/7   11. ¾ x ⅝

12. 12/15 x 20/36   13. 3⅗ x 4⅓

Divide the following fractions. Leave answers in simplest form. (Hint: Keep, change, flip)

14. ⅝ ÷ ¼   15. ⅚ ÷ ⅓

16. Bill and Henrietta cut part of the grass in their neighbor's yard. If Bill cuts ⅓ of the yard and Henrietta cuts ⅖ of the yard, how much of the yard did they cut and how much is left to cut?

17. Sarah and Susan are twin sisters that are not quite the same height. They are trying to reach the top of a shelf in their mother's closet to find their birthday presents. Sarah is 4 ¼ ft tall and Susan is 4 ½ ft tall. If they stand on each other, are they tall enough to reach the shelf if the shelf is 8 ½ ft high?

Add or subtract the following decimals.

18. 3.56 + 0.61

19. 22.1 + 156. 72

20. 5.0 - 3.25

21. 26.86 - 9.76

Multiply the following decimals.

22. 0.5 x 0.5

23. 6.76 x 1.2

24. 0.2 x 0.2

25. 3.4 x 0.42

26. I am going to buy 6 of my favorite candy bars (of course that would be Snickers, no debate!). Each candy bar cost $1.75. Assuming tax is already included in the price, show me if $10 would be enough money to buy all 6 candy bars. If $10 is enough, how much change would I get?

27. Mr. Bender has to load 32 boxes into one of the giant storage containers that are on the campus. If each box is 0.6 meters long and the storage container is 20 meters long, will all the boxes fit? If they do fit, could Mr. Bender also put in a special piece of furniture that is 0.5 meters long?

28. Give an example of the commutative property.

Find the value of x for the following problems.

29.   x + 4 = 10

30. 9 + x = 22

31. x - 12 = 22

32.   2x + 4 = 12

33. x + 8 = 2 (this one is tricky)

34. x + 8 = -2 (this one is really tricky)

For problems 35-37 use the follow set of numbers.
(22, 14, 62, 35, 38, 42, 50, 53, 17, 9)

35. Find the mean of the set of numbers.

36. Find the mode of the set of numbers.

37. Find the median of the set of numbers.

Give an estimate for each of the following situations:

38. Estimate the height of the flagpole on the Highlands quad.

39. Estimate the number of students that will be at Highlands school when we return.

40. Estimate 109 x 203.