

Name _____ Score: _____

Entering 7th Grade – Summer Math Packet

Be sure to attach any work you do on scratch paper and to circle all of your answers.

Find the value for each of the following.

1. $13^1 =$ _____

2. $(\frac{3}{4})^2 =$ _____

3. $|-8| =$ _____

Solve using the order of operations.

4. $108 \div (6 + 3) \times 5^2 =$ _____

5. $4^3 - |16| \times \frac{1}{2} \div 8 =$ _____

Write the GCF (greatest common factor) for each set of numbers.

6. 32, 48 _____

7. 5, 9 _____

8. 18, 27 _____

Write the LCM (least common multiple) for each set of numbers.

9. 4, 16 _____

10. 7, 11 _____

11. 6, 9 _____

Find the prime factorization of each number. You will need to make a factor tree. *Use exponential notation to express your answers.*

12. 48

13. 200

14. 57

Compare the following sets of numbers using $>$, $<$ or $=$ to make the statements true.

15. 4.66 _____ 4.398

16. $3\frac{3}{4}$ _____ $3\frac{6}{8}$

17. -11 _____ -2

18. $\frac{21}{7}$ _____ $2\frac{3}{7}$

19. -62.15 _____ -30.5

20. 0.08 _____ 0.080

Order the following sets of numbers from least to greatest.

21. $0.36, \frac{4}{5}, -7\frac{1}{3}, -3.6, 3\%, 0.892, 0$

22. $4.6, -4\frac{9}{10}, 452\%, -4.27, 4.68, 4.637, -4\frac{1}{5}$

Add or subtract. Make sure your answers are in simplest form.

23. $\frac{4}{5} + \frac{7}{15} =$ _____

24. $\frac{8}{9} - \frac{1}{6} =$ _____

25. $5\frac{2}{3} + 6\frac{9}{10} =$ _____

26. $4\frac{3}{5} - 2\frac{7}{8} =$ _____

Multiply or divide. Make sure your answers are in simplest form. (Remember to find the reciprocal of the divisor.)

27. $\frac{4}{5} \times \frac{1}{8} =$ _____

28. $\frac{9}{11} \times 2 =$ _____

29. $\frac{7}{8} \div \frac{7}{10} =$ _____

30. $\frac{8}{9} \div \frac{12}{45} =$ _____

Multiply or divide. Make sure your answer is in simplest form. (Remember to find the reciprocal of the divisor.)

31. $4\frac{2}{5} \times 6\frac{3}{8} =$ _____

32. $5\frac{5}{12} \times 9 =$ _____

33. $3\frac{4}{7} \div 1\frac{3}{8} =$ _____

34. $6 \div 7\frac{2}{11} =$ _____

Write the following as decimal numbers.

35. $\frac{3}{5} =$ _____

36. $4\% =$ _____

Write the following as a fraction or mixed number.

37. $66\% =$ _____

38. $12.75 =$ _____

Write the following as percentages.

39. $9/100 =$ _____

40. $.0863 =$ _____

Solve.

41. If $5/7$ of the 91 balloons are red and the rest are blue, how many blue balloons are there? _____

42. Half of 1% of the 200,000 college athletes will play pro ball. How many athletes have an opportunity to play pro ball? _____

43. Six pounds of apples cost \$12.00. How much do 8 pounds cost?

44. How much would 1 pound cost? _____

45. If Edward runs at a rate of 2.5 miles an hour. How many hours will it take him to complete 22.5 miles? _____

46. For the algebraic expression $7x - 2y + 3$, let $x = 4$ and $y = 8$. What is the solution to this problem? _____

47. Janice bought lunch for herself and three of her friends. She purchased eight hot dogs for \$2.75 each; four orders of fries for \$1.25 each; and four medium drinks for \$1.75 each. How much did Janice spend on each person?

48. In George's homeroom, there are 25 students. If the ratio of boys to girls is 2 to 3, how many girls are in the class? _____

49. What fraction of the class are girls? _____

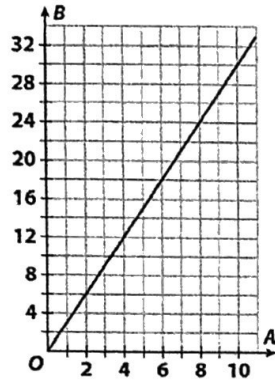
50. What percentage of the class are boys? _____

51. Sandy placed 6 roses and 8 carnations in each bouquet of flowers she made. How many bouquets can she make from 30 roses and 40 carnations?

a. How many roses will she need if she plans on making 12 bouquets?

_____ b. How many carnations? _____

52 - 57.



Choose several points from the graph and make a table of the ordered pairs.

A					
B					

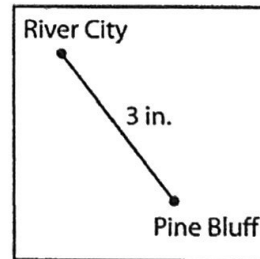
Find the unit rate from the information in the table.

58 - 60.

What is the actual distance between River City and Pine Bluff?

White Oak is 15 miles from River City. What would its distance be on the map? _____

On another map, the distance between River City and Pine Bluff is 6 inches. What is the scale of the map?



Scale: 1 in. = 3 mi.