

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.

Solve.

1. $13^1 =$ _____ 2. $(\frac{3}{4})^2 =$ _____ 3. $|-8| =$ _____

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, 36 _____

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

9. 4, 16 _____ 10. 7, 11 _____ 11. 6, 9, 12 _____

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

18. -62.15 _____ -30.5

19. 0.08 _____ 0.080

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

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

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

22. $5\frac{2}{3} + 6\frac{9}{10} =$ _____

23. $4\frac{3}{5} - 2\frac{7}{8} =$ _____

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

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

25. $\frac{16}{18} \times \frac{3}{6} =$ _____

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

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

28. $\frac{3}{5} \div 3 =$ _____

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

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

30. $4\frac{2}{5} \times 6\frac{3}{8} =$ _____

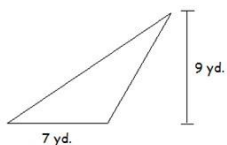
31. $5\frac{5}{12} \times 9 =$ _____

32. $3\frac{4}{7} \div 1\frac{3}{8} =$ _____

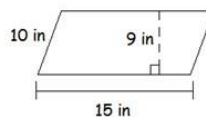
33. $6 \div 7\frac{2}{11} =$ _____

Find the area of the following polygons. *Don't forget to include square units in your answers.*

34.

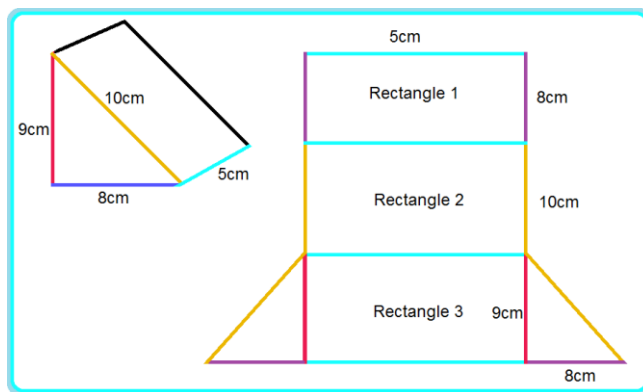


35.



Find the surface area of the triangular prism. Use the net to help you with the dimensions. *Don't forget to include square units in your answer.*

36.



Write the following as decimal numbers.

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

38. $4\% =$ _____

Solve.

39. If $\frac{5}{7}$ of the 91 balloons are red and the rest are blue, how many blue balloons are there? _____

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

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

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

43. A rectangular prism has a length of 5 ft., a width of 3 ft., and a height of 2 ft. What is the prism's **Volume**? _____

44. 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?

45. 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? _____

46. What fraction of the class are girls? _____

47. What percentage of the class are boys? _____

48. If the point (6, 7) is plotted on the coordinate grid and you reflect it over the x-axis, what is the new location of the point? _____

49. What quadrant is the new point located? _____

50. What is the distance between the points? _____