Summer Math Packet for students placed in Pre-Algebra

Dear Students and Parents,

Attached is a Math packet of worksheets for your child to complete over the summer vacation. These cumulative review worksheets are designed to reinforce skills your child has learned during the past school year. This additional practice will help your child master and retain these skills over the summer, so as to be well prepared to handle the Math curriculum in the next grade.

Please encourage your child to work on this Math packet each week. If he/she completes ten problems at a time, it will not be an overwhelming task. We would suggest that a short period of time be set aside on a regular basis (daily/weekly) throughout the summer to complete several problems. Waiting until the last week of summer vacation will defeat the purpose of regular Math practice and increase the chance of careless mistakes from rushing through the problems. We would also recommend that your child save this year's Math notebook and workbook to use as a reference over the summer. He/she may also consult the textbook's website for tutorials and learning support at www.classzone.com .

The student should use a pencil and show the calculations on separate pieces of loose-leaf paper. This work should be numbered and organized neatly on the page, and then stapled to the completed packet. Computation should not be squeezed into the small spaces on the Math packet.

The Math packet (with attached loose-leaf paper) will be collected and checked during the first week of back-to-school in August. A grade will be assigned based on your child's completed assignment, actual calculations and effort.

Thank you in advance for your cooperation in this matter. Do your best! Enjoy your summer!

Sincerely,

Middle school math teachers
Grades 6-8

UNIT 5

Name _____ Date _____

Cumulative Test

For use after Chapters 1-13

For Students Placed in Pre-Algebra

Evaluate the expression for the given value of the variable.

1. $12 - x + 7$, when $x = 5$
2. $2a - 8$, when $a = 19$

Copy and complete the statement using <, >, or =.

3. 0.794 ? 0.749
4. 8.1×10^5 ? 7.05×10^6

Find the mean, median, and mode(s) of the data.

5. Children of the following ages are in an after school activity:

   12, 10, 13, 9, 14, 11, 9, 12, 9

Tell whether the fractions are equivalent.

6. $\frac{3}{11}, \frac{7}{22}$

7. $\frac{2}{7}, \frac{8}{28}$

Find the difference.

8. $7\frac{3}{4} - 4\frac{1}{3}$

Evaluate the expression when $a = -5$, $b = 7$, $c = -2$, and $d = 3.2$.

9. $a^2 - b + (4.7 - d) - c$

Simplify the expression.

10. $-3 - 4b + b - 8$
11. $21t - 9 - 12t + 14$

Solve the equation.

12. $15 + c = -3$

13. $6d = 54$

Write the verbal sentence as an equation. Let x represent the number.

14. 7 less than a number is 15.
15. 3 times the sum of a number and 2 is 12.

Answers

1. _____
2. _____
3. _____
4. _____
5. Mean = _____
   Median = _____
   Mode = _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. c = _____
13. d = _____
14. _____
15. _____

UNIT 5 Continued

Name _____ Date _____

Cumulative Test

For use after Chapters 1–13

Find the sum, difference, product, or quotient.

16. $3.24 + 5.48$

17. 2.4×0.125

18. $21.73 - 14.87$

19. $15.3 \div 0.09$

Find the sum, difference, product, or quotient.

20. $\frac{11}{16} + \frac{3}{4}$

21. $7\frac{2}{5} - 4\frac{7}{10}$

22. $2\frac{1}{3} \cdot 3\frac{3}{4}$

23. $\frac{7}{12} \div \frac{14}{15}$

Find the sum or difference.

24.
$$\begin{array}{r} 8 \text{ ft } 5 \text{ in.} \\ +\ 4 \text{ ft } 9 \text{ in.} \end{array}$$

25.
$$\begin{array}{r} 6 \text{ c } 4 \text{ fl oz} \\ -\ 3 \text{ c } 5 \text{ fl oz} \end{array}$$

Copy and complete the statement using <, >, or =.

26. 17.1 g ___?___ 1.71 mg

27. 1250 mL ___?___ 12.5 kL

Copy and complete the statement.

28. 8 pt = ___?___ c

29. 23 qt = ___?___ gal ___?___ qt

Solve the equation.

30. $4 + t^2 = 68$

Answers

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. t = _____

Name _____ Date _____

Cumulative Test

For use after Chapters 1-13

Write the decimal as a fraction and as a percent.

31. 0.44

Write the percent as a decimal

32. 31.5%

33. What number is 45% of 520?

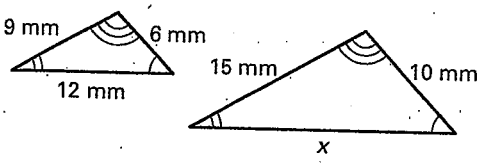
34. 75 is what percent of 30?

Solve the proportion.

35. $\frac{x}{15} = \frac{3}{7.5}$

36. $\frac{12}{16} = \frac{y}{12}$

37. Find the unknown length given that the triangles are similar.



38. The shadow cast by a house is 55 feet long. At the same time, a flagpole that is 15 feet tall casts a 25 foot long shadow. How tall is the house?

Order the integers from least to greatest.

39. 42, −36, 17, −28, 21, −16

Find the sum, difference, product, or quotient.

40. −11 + (−17)

41. 21 − 32

42. 10(−3)

43. −54 ÷ (−6)

Answers

31. _____

_____

32. _____

33. _____

34. _____

35. x = _____

36. y = _____

37. x = _____

38. _____

39. _____

_____

40. _____

41. _____

42. _____

43. _____

UNIT 5 Continued

Name _____ Date _____

Cumulative Test

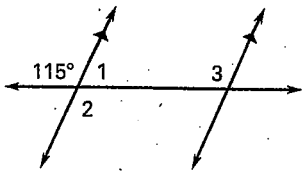
For use after Chapters 1–13

Use the diagram to find the unknown angle measures.

44. $m\angle 1$

45. $m\angle 2$

46. $m\angle 3$



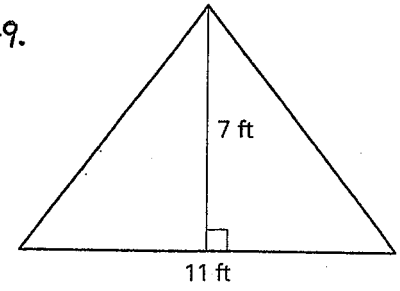
For the given angle measure, find the measure of a supplementary angle and the measure of a complementary angle, if possible.

47. 18°

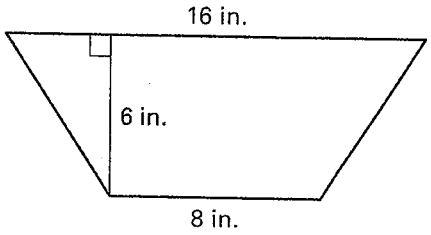
48. Find the sum of the angle measures in a hexagon.

Find the area of the figure.

49.

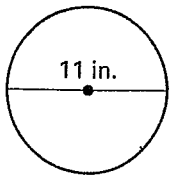


50.



Find the circumference and area of the circle. Use 3.14 for π.

51.



Answers

44. _____

45. _____

46. _____

47. _____

_____

48. _____

49. A = _____

50. A = _____

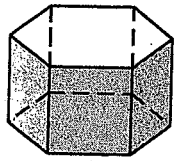
51. C = _____

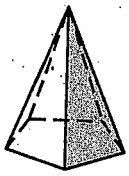
A = _____

Name _____ Date _____

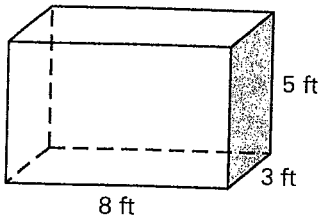
Post-Course Test

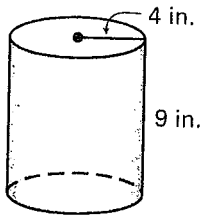
Classify the solid. Be as specific as possible.

52. 

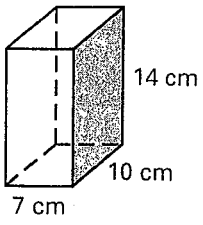
53. 

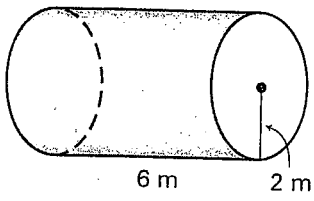
Find the surface area of the solid. Use 3.14 for π.

54. 

55. 

Find the volume of the solid. Use 3.14 for π.

56. 

57. 

Answers

52. _____

_____

53. _____

_____

54. S = _____

55. S = _____

56. V = _____

57. V = _____