

Dear Parent/Guardian,

The fifth grade academic team is suggesting that your child return with the following materials at the beginning of the 2019/2020 school year:

- 2 different colored notebooks
- 1 inch three ring binder
- Headphones/Earbuds
- Filler paper
- 4 boxes of number 2 pencils
- 20 blue/black pens
- Crayons/colored pencils
- 3 large book covers (paper bag covers are fine)
- 1 box of tissues
- 1 roll of paper towels
- 2 highlighters
- Scissors
- Glue stick
- Lysol Wipes

Thank you,
Mrs. Panneton
Mr. Magnuson

Summer Math Reinforcement Packet
Students entering Grade 5

Dear Parent/Guardian,

Our fourth graders had a busy year learning new math skills. Mastery of these skills is extremely important in order to develop a solid math foundation. The fifth grade math program will add on to these fourth grade skills, so any time learning or reinforcing these concepts will be beneficial to your child. Each year builds upon the previous years' skills in math. Any areas your child has difficulty, you may want to give them additional practice.

Have your child complete two pages, per week of the math packet. Students should solve all problems and show work. Please return the completed (signed) packet to Mrs. Panneton on the first day of school. The summer packet will be counted as a test grade for term one. Each child who turns in the packet will receive 50 cougar cash!

After your child has completed the math problems and you feel your child is struggling on a certain concept and needs further practice, you can visit some of the websites listed below.

Enjoy your summer!

REMINDER- Practicing multiplication (up to 12) and division facts are VERY important!!!!!!

Excellent websites for fun learning and reinforcement of math skills:

www.wildmath.com Select "Play the game". Select addition, subtraction or multiplication and grade. You can race to beat your time.

www.harcourtschool.com Click the red box, select math, select HSPMath, select Michigan, click on the "4" ball or "5" ball for a challenge. Select a game.

www.aplusmath.com Go under "Flashcards" or "Game Room" on the left side of the screen. They can practice adding, subtracting and multiplying. Very important to know the addition, subtraction and multiplication facts from memorization or within a couple seconds.

www.mathisfun.com Select numbers then Math Trainer for adding, subtracting and multiplication. Or at the home screen select games and pick a game to play.

www.eduplace.com Select your state - "Michigan" press submit. Select the student tab then click on the "mathematics" rectangle. Click in the center box "Houghton Mifflin Math 2007", Click on "Grade 4". Select any games. Extra Help and Extra Practice is good, also eGames.

www.illuminations.netm.org Select activities then select grade level. Click on Search.

www.aaamath.com At the top pick "Fourth" or "Fifth" for a challenge. Choose any of the activities like multiplication then select "play" option toward the top of the screen. 20 Questions and Countdown games are good ones.

www.funbrain.com Lots of fun games to choose from.

Entering 5th Grade Summer Math Packet

First Name: _____ Last Name: _____

5th Grade Teacher: _____

I have checked the work completed: _____

Parent Signature

Select the one best answer for each question. **DO NOT** use a calculator in completing this packet.1. Which of the following sets of numbers are **all** of the factors of 24?

- A. 1, 3, 8, 24
- B. 2, 4, 6, 8, 12, 24
- C. 2, 3, 4, 6, 8, 12
- D. 1, 2, 3, 4, 6, 8, 12, 24

2. Which of the following numbers is a multiple of 8?

- A. 18
- B. 28
- C. 44
- D. 56

3. The following are all multiples of a one-digit number: 12, 24, 30, 42.

- A. 5
- B. 6
- C. 7
- D. 8

4. Which number is a multiple of 3?

- A. 83
- B. 84
- C. 85
- D. 86

5. Which of the following sets of numbers are all multiples of 7?

- A. 35, 47, 52
- B. 35, 36, 37
- C. 35, 42, 49
- D. 37, 47, 57

6. Al sees this sign at a copy center. What is the least number of copies Al can make without losing any money?

1. Copies cost 10¢ each.
2. Copy machines only take quarters.
3. Copy machines do NOT make change.
If you make 1 copy, you will NOT get 15¢ back.

- A. 5
B. 30
C. 75
D. 150
7. Which of the following is NOT true about prime numbers?
- A. They have exactly two factors
B. One is a factor of every prime number
C. No prime numbers end in zero
D. All prime numbers are odd numbers
8. Which set does NOT contain any multiples of 4?
- A. {24, 36, 42, 54}
B. {12, 15, 20, 24}
C. {8, 16, 24, 34}
D. {6, 10, 14, 18}
9. I am a factor of 36 and a multiple of 3. What number am I?
- A. 2
B. 4
C. 12
D. 15
10. Since $4 \times 10 = 40$, and $40 \times 5 = 200$, then which of the following is true?
- A. $14 \times 45 = 200$
B. $4 \times 10 \times 5 = 200$
C. $4 \times 10 \times 40 = 200$
D. $40 \times 10 \times 5 = 200$
11. My number is a multiple of 5. It is less than 100 and has a factor of 6. What is my number?
- A. 25 C. 60
B. 36 D. 66

15. Solve $206 - 48$.

- A. 158
- B. 242
- C. 162
- D. 262

16. Which expression is equal to 3×49 ?

- A. $3 \times (4 + 9)$
- B. $3 + (40 \times 9)$
- C. $3 \times (40 + 9)$
- D. $(3 \times 4) + (3 \times 9)$

17. Which has the same value as 57×4 ?

- A. $(50 \times 4) + (7 \times 4)$
- B. $(50 + 5) + 2$
- C. $(50 \times 5) + 2$
- D. $(50 \times 4) + 7$

18. Which expression is equal to 83×5 ?

- A. $80 \times (3 + 5)$
- B. $(80 \times 5) + (3 \times 5)$
- C. $(5 \times 80) + 3$
- D. $(80 \times 5) + ((80 \times 3))$

19. Solve the following:

$$\begin{array}{r} 2,749 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} 156 \\ \times 78 \\ \hline \end{array}$$

$$\begin{array}{r} 837 \\ \times 46 \\ \hline \end{array}$$

$$\begin{array}{r} 368 \\ \times 20 \\ \hline \end{array}$$

20. What is 1486 divided by 3? Show your work.

- A. 4,812 r0
- B. 495 r1
- C. 280 r10
- D. 496 r0

21. What is 2520 divide by 10? Show your work.

- A. 25,200
- B. 2,520
- C. 253
- D. 252

22. What is the value of this expression? $420 \div 4$
- A. 15
 - B. 100
 - C. 105
 - D. 150
23. There are 168 lunches to be shared equally among 3 fourth-grade classes. How many lunches will go to each class?
- A. 56
 - B. 165
 - C. 171
 - D. 504
24. What is the value of this expression? $3750 \div 10$
- A. 370
 - B. 375
 - C. 3740
 - D. 37500
25. Which division problem is correct? Show your work.
- A. $4,836 \div 6 = 86$
 - B. $4,836 \div 6 = 806$
 - C. $3,215 \div 5 = 641$
 - D. $3,215 \div 5 = 603$
26. If $600 \div A = 300$, what is A?
- A. 200
 - B. 30
 - C. 20
 - D. 2
27. Fill in the blank with the number that makes this math sentence correct:
- $12 \times \underline{\hspace{2cm}} = 60$
- A. 7
 - B. 4
 - C. 6
 - D. 5

28. What value of A makes the number sentence true?

$$100 \div A = 20$$

- A. 4
- B. 5
- C. 80
- D. 120

29. What value of n makes the equation below true?

$$n \div 7 = 21$$

- A. 3
- B. 28
- C. 141
- D. 147

30. Which value of g makes the number sentence true?

$$g \div 8 = 32$$

- A. 4
- B. 24
- C. 40
- D. 256

31. What value of p makes the equation below true?

$$270 \div p = 27$$


- A. 7
- B. 8
- C. 9
- D. 10

32. Which math problem can be checked using $3 \times 6 = 18$?

- A. $18 \times 3 = \underline{\hspace{2cm}}$
- B. $18 + 3 = \underline{\hspace{2cm}}$
- C. $18 \div 3 = \underline{\hspace{2cm}}$
- D. $18 - 3 = \underline{\hspace{2cm}}$

33. The students in your class collected pop cans to raise money for a class trip. The goal for each student was to collect 150 cans each. There are 27 students in your class. How many cans would that be altogether?

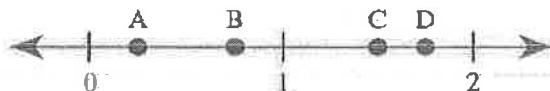
- A. 177 cans
- B. 405 cans
- C. 1350 cans
- D. 4050 cans

34. Suppose 33 photos are placed in a photo album. How many pages are needed if 3 photos fit on a page? Show your work.
- A. 9 pages
 - B. 10 pages
 - C. 11 pages
 - D. 12 pages
35. Which answer means the same as \$12.49?
- A. One and two forty nines
 - B. Twelve and forty nine
 - C. Twelve and forty nine tens
 - D. Twelve and forty nine hundredths
36. Mr. Clark was given some change at the grocery store. He was given 5 one dollar bills, 6 quarters, 2 dimes and a penny. How much change did he get?
- A. \$5.62
 - B. \$6.71
 - C. \$56.21
 - D. \$6.21
37. What decimal part of one dollar is the sum of these coins?
- 
- A. 2.00
 - B. 0.20
 - C. 0.02
 - D. 0.22
38. What is another way to write 0.7 inches?
- A. $\frac{7}{10000}$ inches
 - B. $\frac{7}{1000}$ inches
 - C. $\frac{7}{100}$ inches
 - D. $\frac{7}{10}$ inches
39. Which is equal to 0.45?
- A. $\frac{4}{5}$
 - B. $\frac{45}{100}$
 - C. $\frac{100}{45}$
 - D. $\frac{5}{100}$

40. Which number is the same as one fourth?
(think of $\frac{1}{4}$ of 100 when converting to decimals; think of money)

A. 0.4
B. 0.04
C. 0.25
D. 0.75

41. Which point on the number line below *best* represents 1.75?



A. Point A
B. Point B
C. Point C
D. Point D

42. Match the following: Draw a line to make a match.

Four tenths	.08
Eight hundredths	.3
64 hundredths	.4
3 tenths	.64

43. Divide $3,252 \div 7$

A. 463 R11
B. 464
C. 464 R4

44. Write the following in fraction and decimal form:

Eight tenths = _____ = _____

Twenty-seven hundredths = _____ = _____

Five hundredths = _____ = _____

Five tenths = _____ = _____

45. Write the following fractions in decimal form. Remember: • tenths hundredths

$4/10 =$ _____ $8/10 =$ _____ $23/100 =$ _____ $56/100 =$ _____

$8/100 =$ _____ $5/10 =$ _____ $66/100 =$ _____ $2/10 =$ _____

46. Which number is the same as .5?

- A. One half
- B. $5/1$
- C. Five hundredths
- D. $5/1000$

47. How is eighteen hundredths written in standard form?

- A. 0.018
- B. 0.18
- C. 18.00
- D. 1800

48. Solve each of these without using a calculator:

$4 \times 6 = \underline{\hspace{2cm}}$

$8 \times 8 = \underline{\hspace{2cm}}$

$6 \times 6 = \underline{\hspace{2cm}}$

$2 \times 9 = \underline{\hspace{2cm}}$

$5 \times 5 = \underline{\hspace{2cm}}$

$9 \times 6 = \underline{\hspace{2cm}}$

$8 \times 5 = \underline{\hspace{2cm}}$

$2 \times 2 = \underline{\hspace{2cm}}$

$3 \times 4 = \underline{\hspace{2cm}}$

$32 \div 4 = \underline{\hspace{2cm}}$

$7 \times 7 = \underline{\hspace{2cm}}$

$56 \div 7 = \underline{\hspace{2cm}}$

$72 \div 9 = \underline{\hspace{2cm}}$

$18 \div 2 = \underline{\hspace{2cm}}$

$3 \times 8 = \underline{\hspace{2cm}}$

$45 \div 9 = \underline{\hspace{2cm}}$

$4 \times 4 = \underline{\hspace{2cm}}$

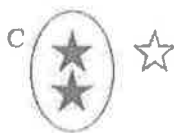
$8 \times 7 = \underline{\hspace{2cm}}$

$24 \div 3 = \underline{\hspace{2cm}}$

$3 \times 3 = \underline{\hspace{2cm}}$

$3 \times 8 = \underline{\hspace{2cm}}$

49. Choose the circled group that represents $1/3$.



- A. A
- B. B
- C. C
- D. D

50. There are 4 red cars, 5 blue cars, and 2 green cars in the parking lot. What is the fraction of Blue cars in the parking lot?

A. $\frac{5}{4}$

B. $\frac{5}{9}$

C. $\frac{5}{11}$

D. $\frac{11}{5}$

51. What is the fraction for the shaded part of this set?



A. $\frac{3}{8}$

B. $\frac{3}{4}$

C. $\frac{3}{7}$

52. Look at this set of objects. Which fraction stands for the part of the set that is shaded?



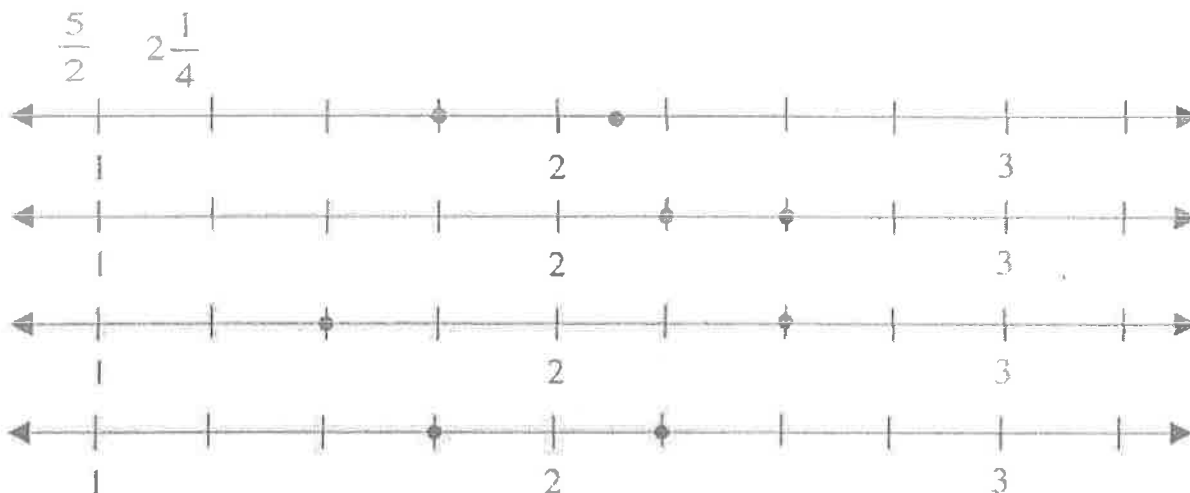
A. $\frac{3}{5}$

B. $\frac{5}{3}$

C. $\frac{5}{8}$

D. $\frac{3}{8}$

53. Which number line shows these two fractions?



54. Which of the following best represents the location of the X on the number line below?



- A. $1\frac{1}{4}$
- B. $1\frac{1}{2}$
- C. $1\frac{3}{4}$
- D. $2\frac{1}{4}$

55. How many twelfths equal $\frac{5}{6}$?

- A. $\frac{10}{12}$
- B. $\frac{11}{12}$
- C. $\frac{6}{12}$
- D. $\frac{5}{12}$

56. How many eighths equal $\frac{1}{4}$?

- A. $\frac{1}{8}$
- B. $\frac{2}{8}$
- C. $\frac{4}{8}$
- D. $\frac{7}{8}$

57. Which number is an improper fraction?

- A. $\frac{11}{12}$
- B. $\frac{5}{8}$
- C. $\frac{8}{5}$
- D. $\frac{6}{7}$

58. Convert this improper fraction into a mixed number. $11/2$

- A. $11 \frac{1}{2}$
- B. $2/11$
- C. $4 \frac{1}{2}$
- D. $5 \frac{1}{2}$

59. Which of the following is listed from smallest to largest? Draw pictures

- A. $\frac{11}{4}, \frac{15}{6}, 2\frac{7}{12}$
- B. $\frac{15}{6}, \frac{8}{3}, 2\frac{7}{12}$
- C. $\frac{15}{6}, 2\frac{7}{12}, \frac{8}{3}$
- D. $\frac{8}{3}, 2\frac{7}{12}, \frac{11}{4}$

60. Solve the following:

$1 \times 9 = \underline{\quad}$

$3 \times 6 = \underline{\quad}$

$9 \times 7 = \underline{\quad}$

$6 \times 2 = \underline{\quad}$

$8 \times 6 = \underline{\quad}$

$2 \times 2 = \underline{\quad}$

$3 \times 8 = \underline{\quad}$

$9 \times 9 = \underline{\quad}$

$24 \div 3 = \underline{\quad}$

$7 \times 7 = \underline{\quad}$

$56 \div 7 = \underline{\quad}$

$4 \times 0 = \underline{\quad}$

$48 \div 6 = \underline{\quad}$

$18 \div 6 = \underline{\quad}$

$7 \times 3 = \underline{\quad}$

$7 \times 7 = \underline{\quad}$

61. Which of the following is a prime number?

- A. 21
- B. 33
- C. 49
- D. 53

62. Choose the equation that is NOT true.

A. $\frac{1}{2} + \frac{3}{8} = \frac{7}{8}$

B. $\frac{1}{6} + \frac{5}{12} = \frac{7}{12}$

C. $\frac{3}{10} - \frac{23}{100} = \frac{7}{100}$

D. $\frac{8}{10} - \frac{3}{5} = \frac{2}{5}$

63. The distance from home to school is $\frac{7}{8}$ of a mile for Amy and $\frac{4}{8}$ of a mile from Tom. How much farther does Amy walk than Tom?
- A. $\frac{11}{8}$
 - B. $\frac{11}{16}$
 - C. $\frac{3}{16}$
 - D. $\frac{3}{8}$
64. Sonya needs $\frac{1}{2}$ teaspoon of salt for her recipe to make rolls. She needs $\frac{1}{4}$ teaspoon of salt for her recipe to make biscuits. How much salt will she need to make both recipes?
- A. $\frac{2}{6}$ tsp.
 - B. $\frac{3}{4}$ tsp.
 - C. $\frac{1}{8}$ tsp.
 - D. $\frac{1}{6}$ tsp.
65. Solve for the unknown in this equation: $\frac{2}{4} + n = \frac{3}{4}$ $n =$ _____
- A. $\frac{5}{4}$
 - B. $\frac{1}{2}$
 - C. $\frac{1}{4}$
 - D. $\frac{5}{8}$
66. How much is $1.35 \div 5$? Do not use a calculator!
- A. .27
 - B. .35
 - C. .5
 - D. 1.7
67. How much is $1.14 \div 2$? Do not use a calculator. (Line up and move decimal straight up into answer)
- A. .7
 - B. .52
 - C. .57
 - D. 1.7
68. Which of the following is closest to the sum of 811 and 356? No calculator☺.
- A. 1400
 - B. 1300
 - C. 1200
 - D. 1100
69. Which of the following is closest to the product of 81 and 82? Do not use a calculator.
- A. 6400
 - B. 7200
 - C. 720
 - D. 64,000

70. One hundred fourth graders at Beacon Tree Elementary are attending a field day. The teachers need to know how many hot dogs to buy. All the following are reasonable approximations EXCEPT.

- A. 100 hot dogs
- B. 150 hot dogs
- C. 200 hot dogs
- D. 50 hot dogs

71. A cat sleeps an average of 17 hours each day. About how many hours does a cat sleep in a month?

- A. 300 hours
- B. 600 hours
- C. 170 hours
- D. 6000 hours

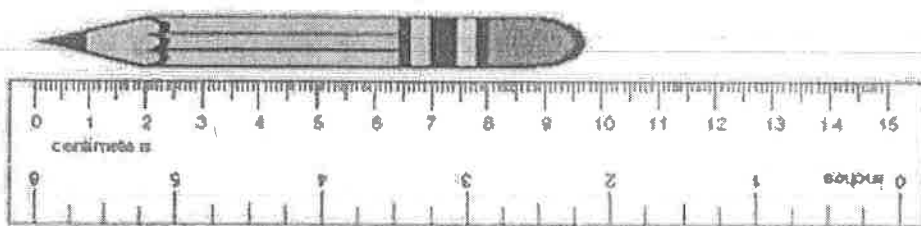
72. Find the difference: Remember "bottom bigger better borrow" and you can only borrow from next door. You can always check your answers by adding your answer and the second number and this should equal your top number.

$$\begin{array}{r} 701 \\ - 35 \\ \hline \end{array} \quad \begin{array}{r} 68 \\ - 27 \\ \hline \end{array} \quad \begin{array}{r} 100 \\ - 37 \\ \hline \end{array} \quad \begin{array}{r} 63 \\ - 47 \\ \hline \end{array} \quad \begin{array}{r} 35 \\ - 15 \\ \hline \end{array} \quad \begin{array}{r} 114 \\ - 37 \\ \hline \end{array} \quad \begin{array}{r} 66 \\ - 24 \\ \hline \end{array}$$

73. Find the product:

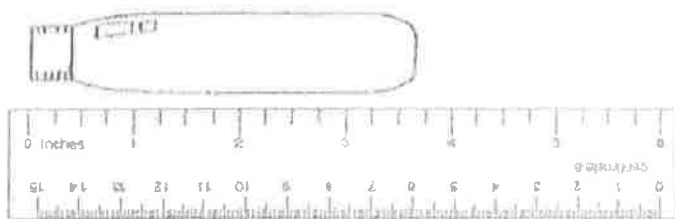
$$\begin{array}{r} 36 \\ \times 47 \\ \hline \end{array} \quad \begin{array}{r} 47 \\ \times 68 \\ \hline \end{array} \quad \begin{array}{r} 59 \\ \times 39 \\ \hline \end{array} \quad \begin{array}{r} 28 \\ \times 18 \\ \hline \end{array} \quad \begin{array}{r} 19 \\ \times 47 \\ \hline \end{array} \quad \begin{array}{r} 56 \\ \times 36 \\ \hline \end{array} \quad \begin{array}{r} 78 \\ \times 37 \\ \hline \end{array}$$

74. This pencil is about how many centimeters long?



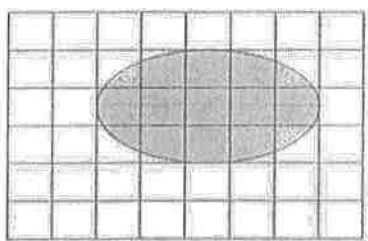
- A. 9 cm
- B. 10 cm
- C. 11 cm
- D. 12 cm

75. What is the length of this light bulb to the nearest inch?



- A. 2 in.
- B. 3 in.
- C. 4 in.
- D. 5 in.

76. What is the best estimate of the area, in square centimeters, of the SHADED FIGURE on the grid below? One square equals one square centimeter.



- A. 5 square centimeters
- B. 11 square centimeters
- C. 13 square centimeters
- D. 15 square centimeters

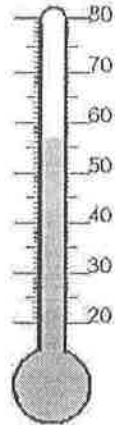
77. Which is most likely the length of a telephone book?

- A. 30 kilometers
- B. 30 centimeters
- C. 30 millimeters
- D. 30 meters

78. Brent is making a sail for a toy boat. The sail needs to be 3.55 cm wide. Which measure would be MOST useful in making the sail?

- A. To the nearest millimeter
- B. To the nearest decimeter
- C. To the nearest meter
- D. To the nearest kilometer

79. What temperature is shown on this thermometer, to the nearest degree?

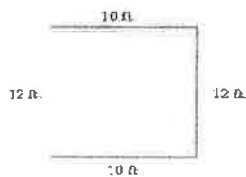


- A. 50 degrees C
- B. 55 degrees C
- C. 57 degrees C
- D. 60 degrees C

80. Bobbie was writing an article for the school newspaper about the amount of homework the 4th grade teachers were assigning. He was surprised to find out that the average student only spent 20 minutes per night doing homework. To make it sound longer, he decided to convert the time from minutes to seconds in the article. How many seconds did the average student spend on homework?

- A. 80 seconds
- B. 120 seconds
- C. 800 seconds
- D. 1,200 seconds

81. Sheryl planned to buy a wall paper border for her bedroom. She measured the lengths of the walls and found the perimeter of her room. Use the picture below to determine the perimeter.

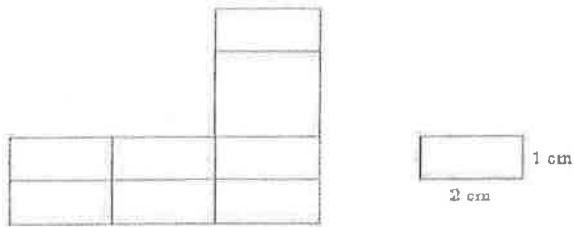


- A. 22 ft.
- B. 34 ft.
- C. 44 ft.
- D. 120 ft.

82. Sheryl may want to buy new carpeting for her room. She needs the square footage of the room to take to the store to price how much carpeting would be. What is the area of her room in the picture above?

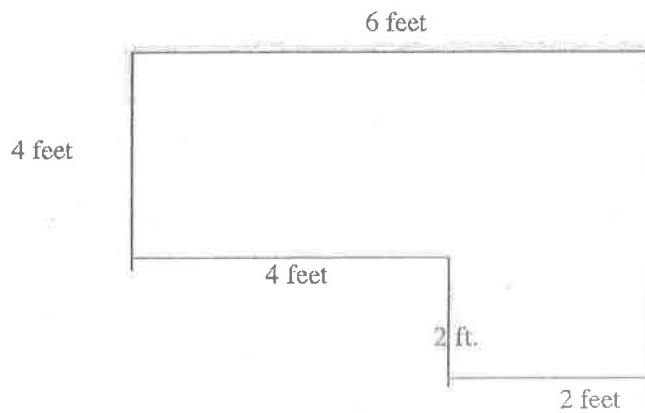
- A. 22 square feet
- B. 120 square feet
- C. 100 square feet
- D. 144 square feet

83. Using the formula for finding the area, what is the area of the figure below?



- A. 18 sq. cm.
- B. 22 sq. cm.
- C. 32 sq. cm.
- D. 54 sq. cm.

84. Find the perimeter of the figure below?

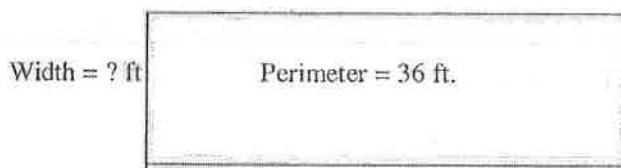


- A. 12 feet
- B. 18 feet
- C. 24 feet
- D. 36 feet

85. What is the area of the figure above?

- A. 12 square feet
- B. 28 square feet
- C. 24 square feet
- D. 36 square feet

86. Sharon had a rectangular garden with a perimeter of 36 feet. The fence surrounding it was falling down on one of the short sides (width). If the length of the garden was 10 feet, how many feet of fence did she need to replace the broken portion (width) of the fence?



- A. 6 feet
- B. 8 feet
- C. 10 feet
- D. 26 feet

87. What is the area of the rectangle garden on the previous page (#86)?

- A. 6 square feet
- B. 18 square feet
- C. 80 square feet
- D. 100 square feet

88. If the perimeter of a square is 48 cm, what is the length of each side? (Draw a picture and think of the key word of what type of shape it is.)

- A. 8 cm
- B. 10 cm
- C. 12 cm
- D. 24 cm

89. What is the width of a rectangle that has a length of 6 feet and an area of 60 square feet?
Draw a picture.

- A. 10 feet
- B. 12 feet
- C. 24 feet
- D. 66 feet

90. What is the width of a rectangle with a length of 5 inches and a perimeter of 16 inches?
Draw a picture.

- A. 2 inches
- B. 3 inches
- C. 8 inches
- D. 21 inches

91. Sarah opens her book. What is the angle formed by the open book?



- A. less than a right angle (acute)
 - B. equal to a right angle
 - C. greater than a right angle (obtuse)
 - D. cannot tell without a picture of a right angle
92. Which of the following is closest to 8×0.92 ?
- A. 800
 - B. 80
 - C. 8

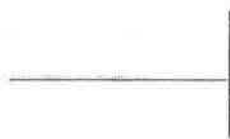
93. What is the size of this angle?



- A. acute
 - B. equal to a right angle
 - C. obtuse
 - D. cannot tell without a picture of a right angle
94. Which angle is a right angle?

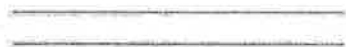


95. These lines are



- A. parallel
- B. perpendicular
- C. not intersecting

96. These lines are



- A. parallel
- B. perpendicular
- C. intersecting

97. Find the difference. Remember bottom bigger better borrow.

$$\begin{array}{r} 307 \\ -147 \\ \hline \end{array}$$

$$\begin{array}{r} 821 \\ -424 \\ \hline \end{array}$$

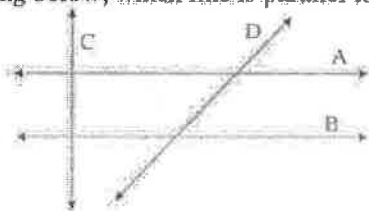
$$\begin{array}{r} 600 \\ -323 \\ \hline \end{array}$$

$$\begin{array}{r} 501 \\ -247 \\ \hline \end{array}$$

$$\begin{array}{r} 427 \\ -247 \\ \hline \end{array}$$

$$\begin{array}{r} 800 \\ -248 \\ \hline \end{array}$$

98. In the drawing below, which line is parallel to line A?



- A. none of them
- B. B
- C. C
- D. D

In the drawing above, which line is perpendicular to A?

- A. none of them
- B. B
- C. C
- D. D

99. Which type of triangle has only 2 equal sides, like the drawing below?



- A. equilateral triangle
- B. isosceles triangle
- C. pyramid
- D. right triangle

100. Which geometric figure is shown here?



- A. equilateral triangle
- B. isosceles triangle
- C. pyramid
- D. right triangle

101. Answer the following questions on the figure below.



How many vertices does the box above have?

- A. 3 vertices
- B. 8 vertices
- C. 10 vertices
- D. 18 vertices

How many faces does the box above have?

- A. 6 faces
- B. 8 faces
- C. 10 faces
- D. 18 faces

How many edges does the box above have?

- A. 3 edges
- B. 9 edges
- C. 12 edges
- D. 18 edges

