MMLA Mathematics Assessment Items

Name: _____ Date: _____

Multiple Choice Questions
Select the one best answer for each question.

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. Identify the one-digit factor common to each multiple.

A. 5

B. 6

C. 7

D. 8

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

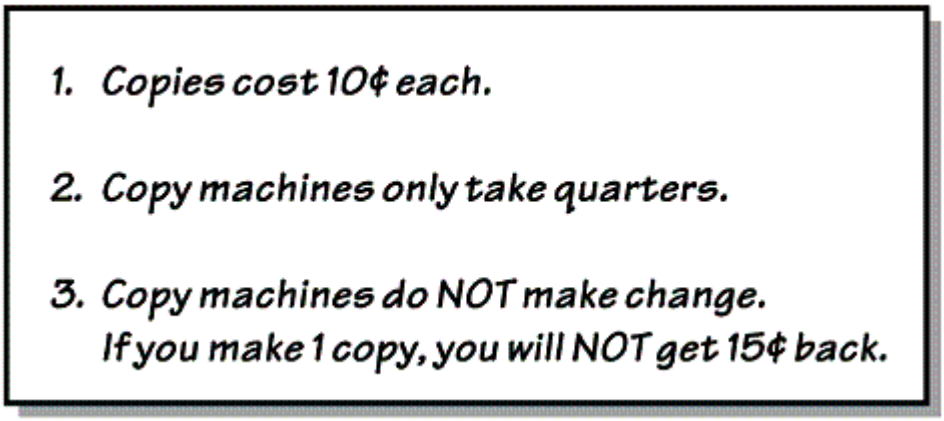
A. 35, 47, 52

B. 35, 36, 37

C. 35, 42, 49

D. 37, 47, 57

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



A. 5

B. 30

C. 75

D. 150

6. 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.

7. I am a factor of 36 and a multiple of 3. What number am I?

A. 2

B. 4

C. 12

D. 15

8. Since 4 x 10 = 40, and 40 x 5 = 200, then which of the following is true?

A. 14 x 45 = 200

B. 4 x 10 x 5 = 200

C. 4 x 10 x 40 = 200

D. 40 x 10 x 5 = 200

9. My number is a multiple of 5. It is less than 100 and has a factor of 6. What is my number?

A. 25

B. 36

C. 60

D. 66

10. Solve 136-67.

A. 61

B. 69

C. 71

D. 79

11. Solve 206 - 48.

A. 158

B. 242

C. 162

D. 262

12. Which expression is equal to 3 x 49?

A. 3 x (4 + 9)

B. 3 + (40 x 9)

C. 3 x (40 + 9)

D. (3 x 4) + (3 x 9)

13. Which expression is equal to 83 x 5?

A. 80 x (3 + 5)

B. (80 x 5) + (3 x 5)

C. (5 x 80) + 3

D. (80 x 5) + (80 x 3)

14. Sari was asked to describe how to find the answer to 28 x 7 to her class. Which explanation makes the most sense?

A. I added 20 + 7 to get 27 and I added 20 + 8 to get 28. Then I multiplied 27 by 28 to get 756. So 28 x 7 = 756.

B. I multiplied 20 x 8 to get 160. Then I multiplied 20 x 7 to get 140. I added 160 + 140 to get 300. So 28 x 7 = 300.

C. I multiplied 20 x 7 and got 140. Then I did 8 x 7 and got 56. So I added 140 to 56 to get 196. So, 28 x 7 = 196.

D. I did 28 + 28 and got 56. I did that 7 times. So I added 56 seven times to get 392. So, 28 x 7 = 392.

15. Solve:

$$\begin{array}{r} 2{,}749 \\ \times\ 8 \\ \hline \end{array}$$

A. 16,563,272

B. 22.001

C. 22,692

D. 21,992

16. What is 1486 divided by 3?

A. 4,812 r0

B. 495 r1

C. 280 r10

D. 496 r0

17. What is the value of this expression? (Do not use a calculator to find the answer) (MEAP)

$$420 \div 4$$

A. 15

B. 100

C. 105

D. 150

18. There are 168 lunches to be shared equally among 3 fourth-grade classes. How many lunches will go to each class? (Do not use a calculator to find the answer) (MEAP)

A. 56

B. 165

C. 171

D. 504

19. What is the value of this expression? (Do not use a calculator to find the answer) (MEAP)

$$3750 \div 10$$

A. 370

B. 375

C. 3740

D. 37500

20. Which division problem is correct? (Do not use a calculator.)

A. 4,836 ÷ 6 = 86

B. 4,836 ÷ 6 = 806

C. 3,215 ÷ 5 = 641

D. 3,215 ÷ 5 = 603

21. If 600 ÷ A = 300, what is A?

A. 200

B. 30

C. 20

D. 2

22. Fill in the blank with the number that makes this math sentence correct:

12 x __ = 60

A. 7

B. 4

C. 6

D. 5

23. What value of *a* makes the number sentence true? (MEAP)

$100 \div a = 20$

A. 4

B. 5

C. 80

D. 120

24. Which value of *g* makes the number sentence true? (MEAP)

$$g \div 8 = 32$$

A. 4

B. 24

C. 40

D. 256

25. Which math problem can be checked using 3 x 6 = 18? (MEAP)

A. 18 x 3 = _

B. 18 + 3 = _

C. 18 ÷ 3 = _

D. 18 - 3 = _

26. 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

27. Suppose 33 photos are placed in a photo album. How many pages are needed if 3 photos fit on a page?

A. 9 pages

B. 10 pages

C. 11 pages

D. 12 pages

28. Which answer means the same as $12.49?

A. one and two forty nines

B. twelve and forty nine

C. twelve and forty nine tenths

D. twelve and forty nine hundredths

29. 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

30. What decimal part of one dollar is the sum of these coins? (MEAP)

A. 2.00

B. 0.20

C. 0.02

D. 0.22

31. What is another way to write 0.7 inches? (MEAP)

A. 7/10000 inches

B. 7/1000 inches

C. 7/100 inches

D. 7/10 inches

32. Which is equal to 0.45?

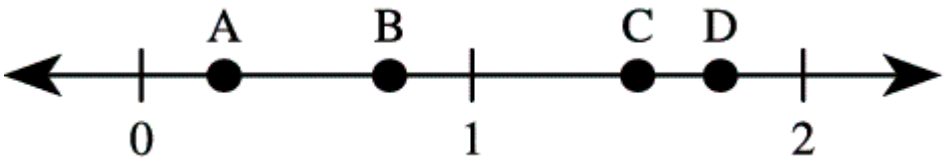
A. $\frac{4}{5}$

B. $\frac{45}{100}$

C. $\frac{100}{45}$

D. $\frac{5}{100}$

33. Which point on the number line below *best* represents 1.75? (MEAP)



A. Point A

B. Point B

C. Point C

D. Point D

34. Which number is the same as one fourth?

A. 0.4

B. 0.04

C. 0.25

D. 0.75

35. Which number is the same as .5?

A. one half

B. 5/1

C. five hundreths

D. 5/1000

36. How is eighteen hundredths written in standard form? (MEAP)

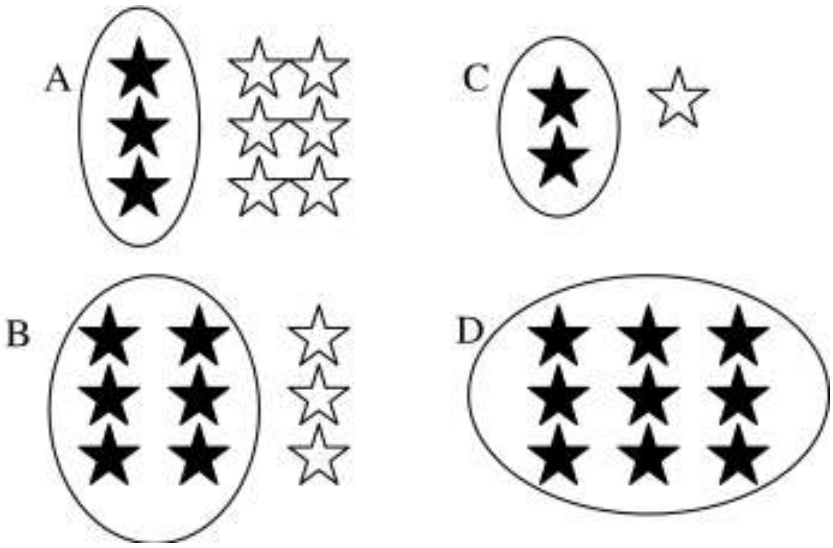
A. 0.018

B. 0.18

C. 18.00

D. 1800

37. Choose the circled group that represents 1/3.



A. A

B. B

C. C

D. D

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

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

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

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

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

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

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

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

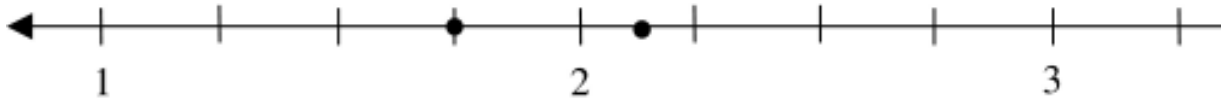
C. $\frac{5}{8}$

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

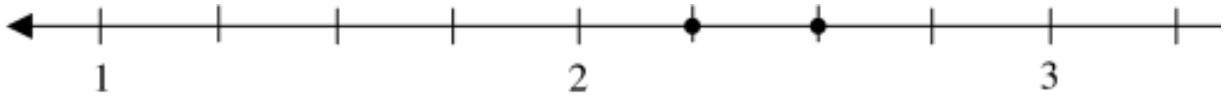
41. Which number line shows these two fractions?

$\frac{5}{2}$ $2\frac{1}{4}$

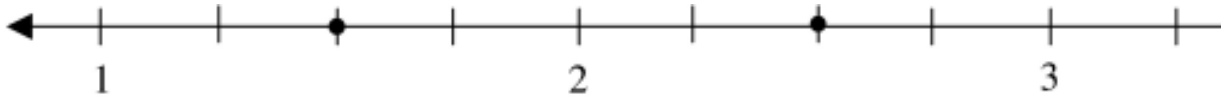
A.



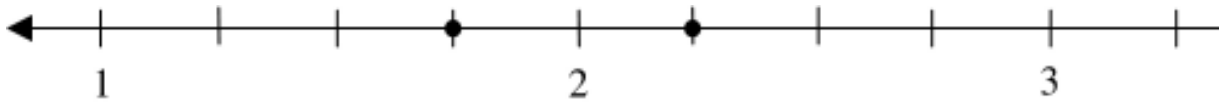
B.



C.



D.



42. How many twelfths equal

$$\frac{5}{6}$$

A. $\frac{10}{12}$

B. $\frac{11}{12}$

C. $\frac{6}{12}$

D. $\frac{5}{12}$

43. How many eighths equal

$$\frac{1}{4}$$

A. $\frac{1}{8}$

B. $\frac{2}{8}$

C. $\frac{4}{8}$

D. $\frac{7}{8}$

44. Which number is an improper fraction?

A. $\frac{11}{12}$

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

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

D. $\frac{6}{7}$

45. Convert this improper fraction into a mixed number.

$$\frac{11}{2}$$

A. $11\frac{1}{2}$

B. $\frac{2}{11}$

C. $4\frac{1}{2}$

D. $5\frac{1}{2}$

46. Which of the following is listed from smallest to largest?

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.

$\frac{8}{3}, 2\frac{7}{12}, \frac{11}{4}$

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

48. The distance from home to school is 7/8 of a mile for Amy and 4/8 of a mile for Tom. How much farther does Amy walk than Tom?

A. $\frac{11}{8}$

B. $\frac{11}{16}$

C. $\frac{3}{16}$

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

49. Sonya needs 1/2 teaspoon of salt for her recipe to make rolls. She needs 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

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

51. How much is 1.35 ÷ 5? Do not use a calculator for this problem.

A. .27

B. .35

C. .5

D. 1.7

52. How much is 1.14 ÷ 2? Do not use a calculator for this problem.

A. .7

B. .52

C. .57

D. 1.7

53. Which of the following is closest to the sum of 811 and 356? Do not use a calculator for this problem.

A. 1400

B. 1300

C. 1200

D. 1100

54. Which answer is the closest estimate for 6500 + 310? Do not use a calculator for this problem.

A. 6800

B. 7500

C. 9500

D. 9600

55. Which of the following is closest to the product of 81 and 82? Do not use a calculator for this problem.

A. 6400

B. 7200

C. 720

D. 64,000

56. In which of the following situations is it NOT appropriate to approximate?

A. How much television you watch?

B. How many video games you own?

C. How much medicine you take when you are sick?

D. How much your puppy weighs?

57. One hundred fourth graders at Blair Moody Elementary are attending a field day. The teachers need to know how many hot dogs to buy. All of the following are reasonable approximations EXCEPT:

A. 100 hot dogs

B. 150 hot dogs

C. 200 hot dogs

D. 50 hot dogs

58. 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

59. Which of the following is closest to the difference between 714 and 382?

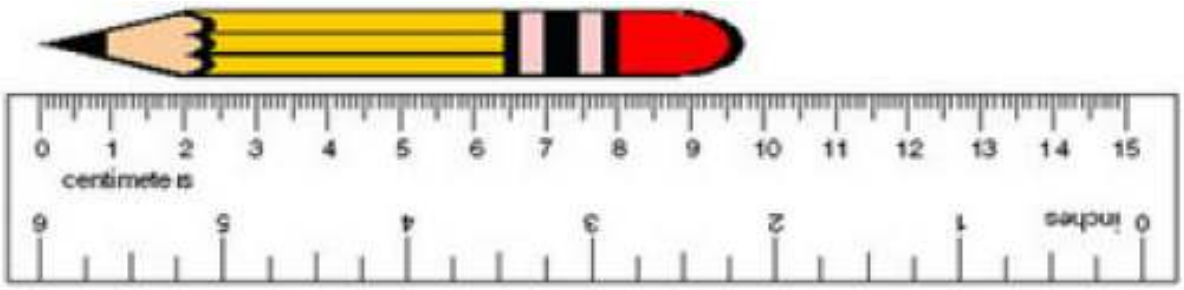
A. 400

B. 300

C. 100

D. 200

60. This pencil is about how many centimeters long?



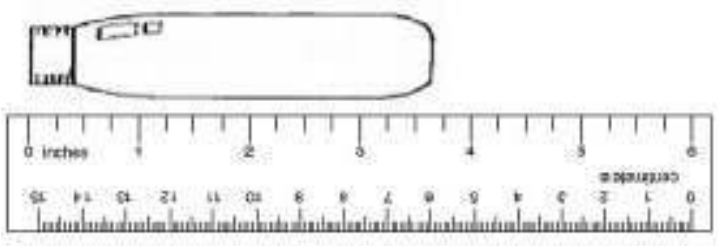
A. 9 cm

B. 10 cm

C. 11 cm

D. 12 cm

61. What is the length of this lightbulb to the nearest inch?



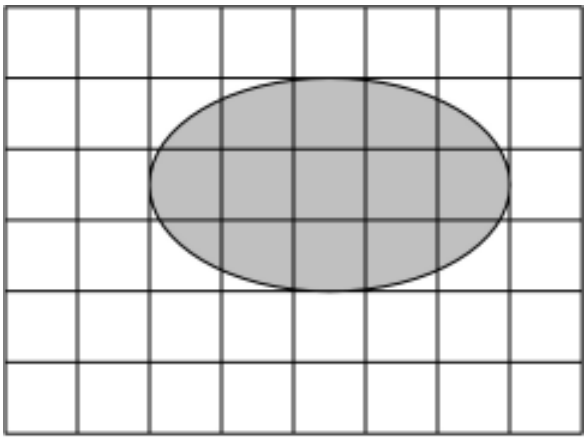
A. 2 in

B. 3 in

C. 4 in

D. 5 in

62. 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.



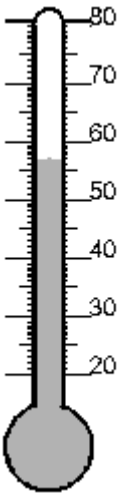
A. 5 square centimeters

B. 11 square centimeters

C. 13 square centimeters

D. 15 square centimeters

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



A. 50°C

B. 55°C

C. 57°C

D. 60°C

64. When Nick broke his wrist he was told it would be 3 weeks before his cast could be taken off. How many days was that?

A. 9 days

B. 18 days

C. 21 days

D. 22 days

65. Bobbie was writing an article for the school newspaper about the amount of homework the 4th grade teachers were assigning. He was suprised 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?

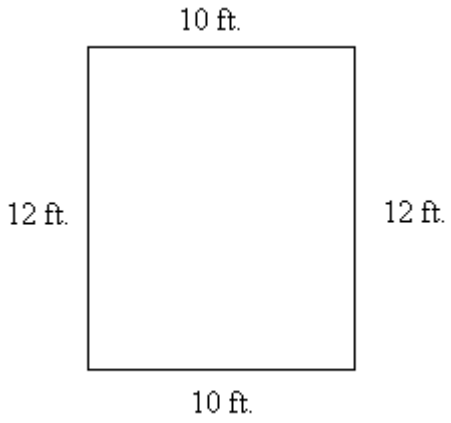
A. 80 seconds

B. 120 seconds

C. 800 seconds

D. 1,200 seconds

66. Nikki 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.

67. Using the formulas for finding perimeter and area, what is the area of figure A?

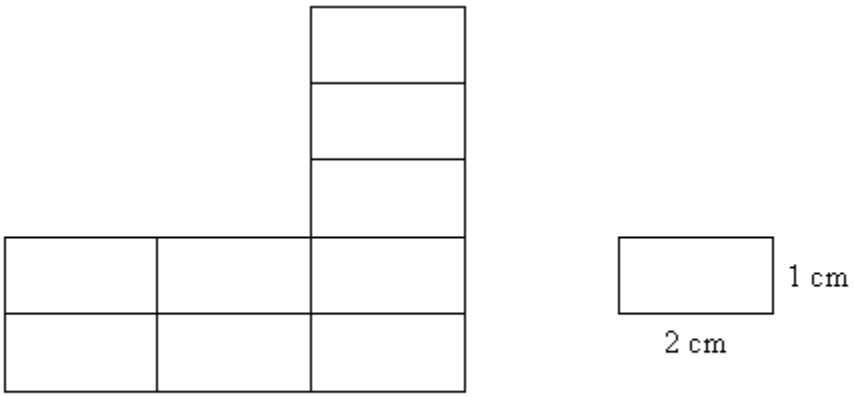


Figure A

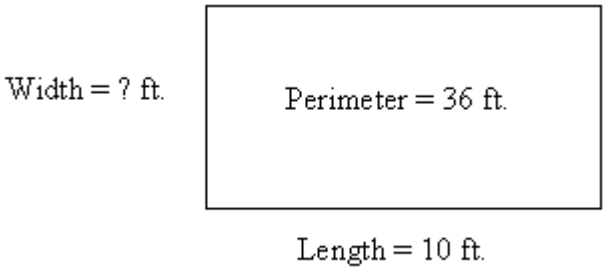
A. 18 sq cm

B. 22 sq cm

C. 32 sq cm

D. 54 sq cm

68. Christina 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

69. If the perimeter of a square is 48 cm , what is the length of each side?

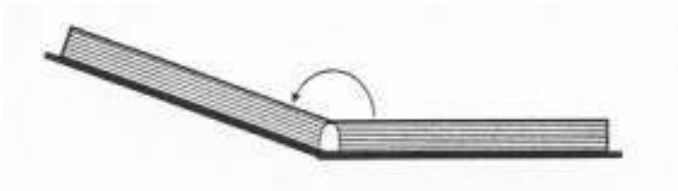
A. 8 cm

B. 10 cm

C. 12 cm

D. 24 cm

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



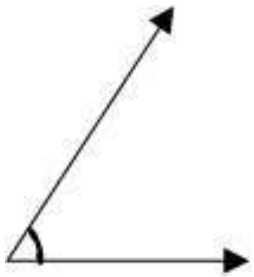
A. less than a right angle

B. equal to a right angle

C. greater than a right angle

D. cannot tell without a picture of a right angle

71. What is the size of this angle?



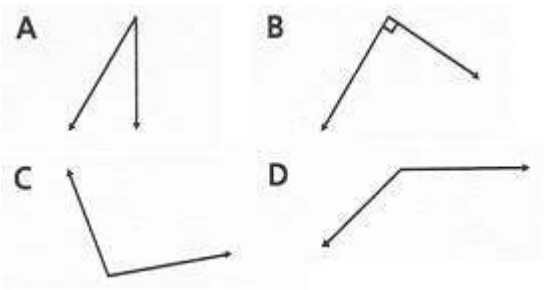
A. less than a right angle

B. equal to a right angle

C. greater than a right angle

D. cannot tell without a picture of a right angle

72. Which angle is a right angle?



A. A

B. B

C. C

D. D

73. The school crossing guard holds out her arms to stop traffic. What kind of angle is formed by the guard's arms?

A. less than a right angle

B. equal to a right angle

C. greater than a right angle

D. cannot tell without a picture of a right angle

74. These lines are

A. parallel

B. perpendicular

C. not intersecting

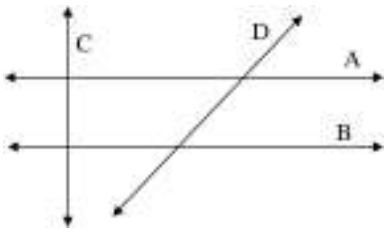
75. The lines are

A. parallel

B. perpendicular

C. intersecting

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



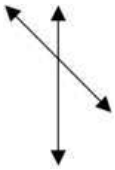
A. none of them

B. B

C. C

D. D

77. These lines are



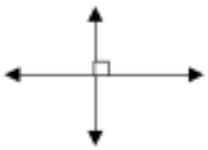
A. perpendicular

B. square

C. intersecting

D. parallel

78. These lines are



A. perpendicular

B. congruent

C. not intersecting

D. parallel

79. Which type of triangle has only two equal sides, like the drawing below?

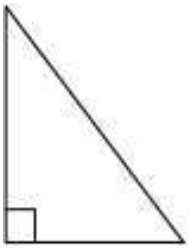
A. equilateral triangle

B. isosceles triangle

C. pyramid

D. right triangle

80. Which geometric figure is shown here?



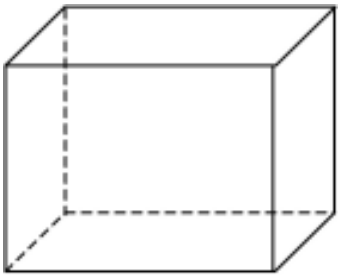
A. equilateral triangle

B. isosceles triangle

C. pyramid

D. right triangle

81. How many vertices does this box have?



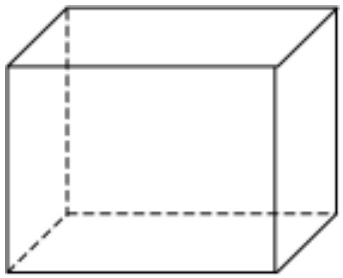
A. 6 vertices

B. 8 vertices

C. 12 vertices

D. 18 vertices

82. How many faces does this figure have?



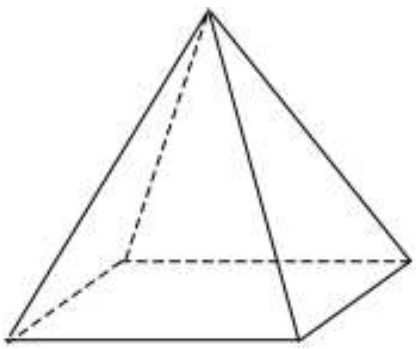
A. 4 faces

B. 6 faces

C. 8 faces

D. 12 faces

83. How many faces does this figure have?



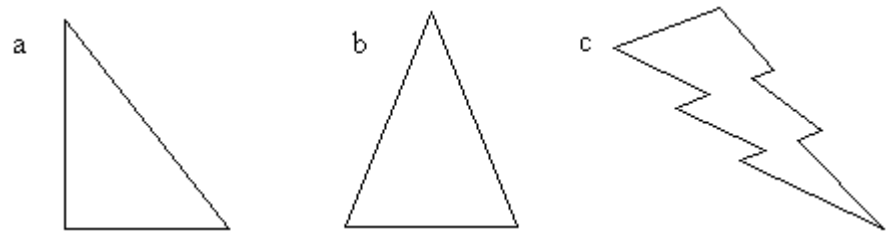
A. 2 faces

B. 3 faces

C. 4 faces

D. 5 faces

84. Which of these shapes can be folded in half so that both halfs are the same?

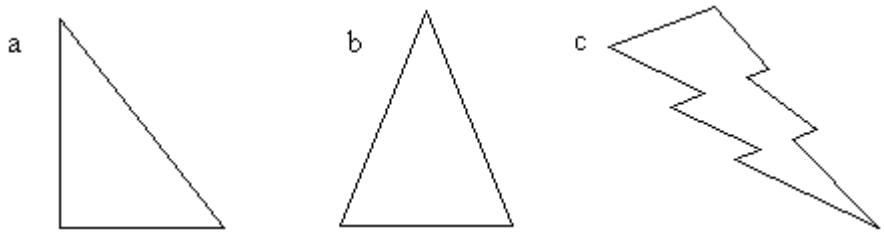


A. a

B. b

C. c

85. Which of these shapes has line symmetry? Show this by drawing the line of symmetry on the figure, then choosing the correct answer.



A. a

B. b

C. c

86. Which transformation has taken place to figure A to create figure B?

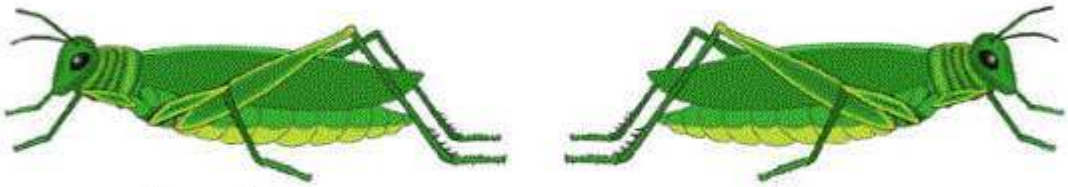


Figure A Figure B

A. tessellation

B. copy

C. flip

D. slide

87. Laura wrote 200 words on the first page of her journal. After the second page, she had 400 words. If the pattern continues, how many pages will it take her to write 1000 words? Continue to fill in the table to find the answer.

Page Number	Words	Total words
1	200	200
2	200	400
3		
4		
5		
6		
7		
8		

A. 3

B. 4

C. 5

D. 6

88. What is the median number for this set of data? {2, 2, 3, 5, 10, 10, 10}

A. 5

B. 6

C. 7

D. 8

89. What is the range for this set of numbers?

8 11 18 11 20 9

A. 8

B. 11

C. 12

D. 20

90. What is the median for this set of numbers?

2 8 4 4 15 7 14

A. 4

B. 7

C. 8

D. 13

91. In which set is the median the same as the range?

A. 3, 4, 6, 8, 3, 4

B. 2, 4, 5, 6, 4

C. 1, 5, 6, 10, 4

D. 7, 8, 3, 6, 1

92. The number of points scored in 9 football games is listed below. Find the range of points scored.

GAME	POINTS
1	7
2	13
3	18
4	24
5	7
6	9
7	3
8	18
9	13

A. 8

B. 9

C. 12

D. 21

93. Find the range of: 4, 12, 13, 6, 5, 8.

A. 4

B. 8

C. 9

D. 13

94. Find the median of: 9, 4, 3, 7, 2, 8, 4.

A. 4

B. 5

C. 6

D. 7

95. During July, the third and fourth graders kept track of the number of minutes they read each week.Use this graph to figure out how many minutes total the third graders read in July.

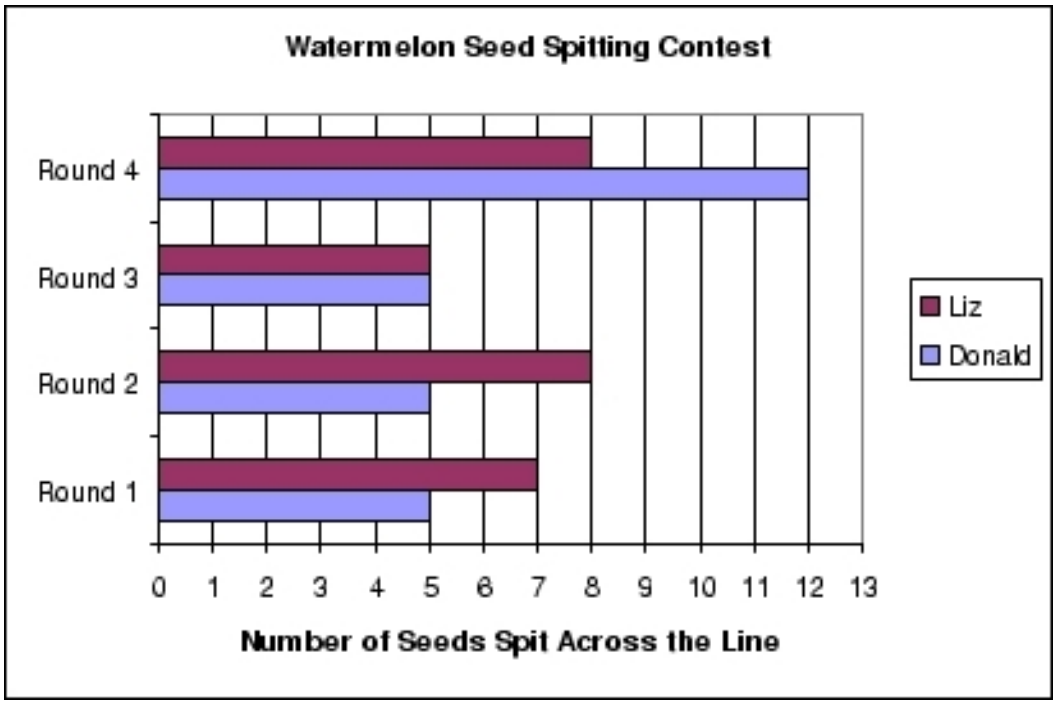
A. 250

B. 400

C. 1000

D. 2700

96. How many more total seeds did Liz spit across the line than Donald, in all 4 rounds?



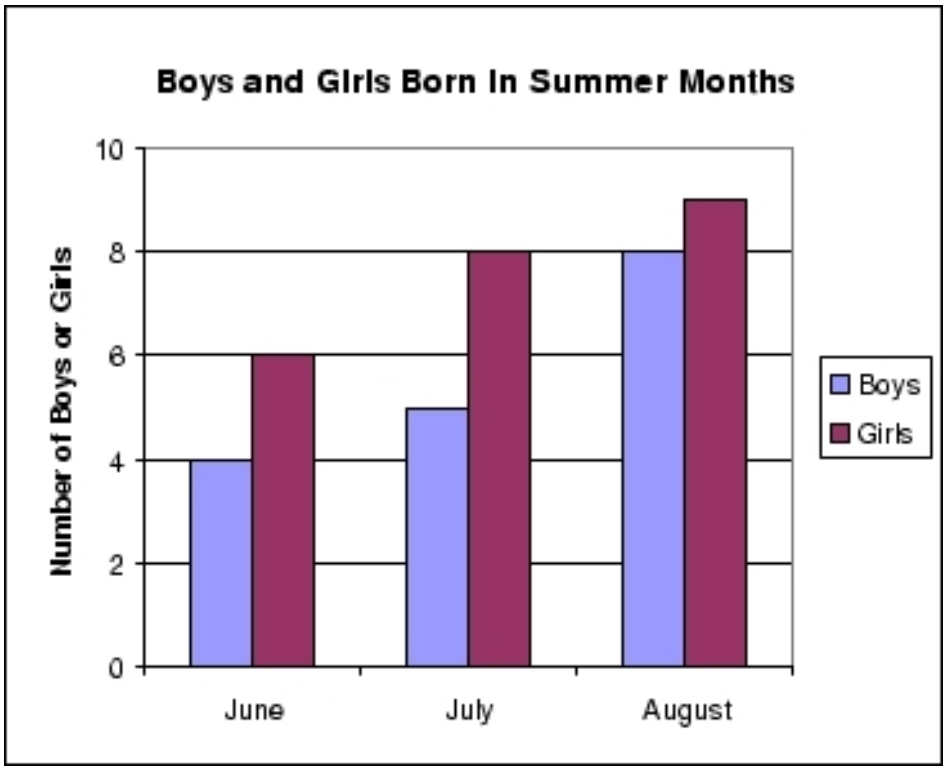
A. 1

B. 4

C. 5

D. 7

97. How many more girls were born in June through August than boys?



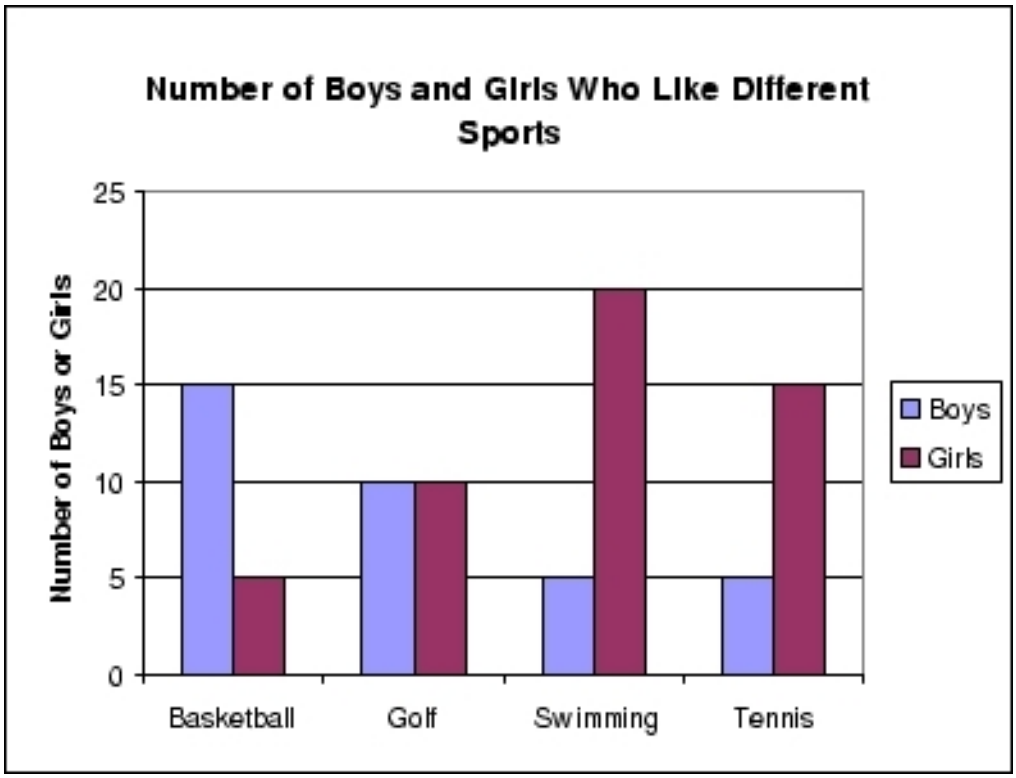
A. 5

B. 6

C. 7

D. they are the same

98. How many more boys like basketball than girls?



A. 5

B. 10

C. 15

D. 20

Open-Ended Questions
Provide your answer in the space provided.

1. Mr. Smith is setting up chairs for an assembly of 50 students.

Using all factors of 50, list the different possibilities for arranging the chairs in rectangular arrays.

2.

Do the following multiplications. Show your work. (Do not use a calculator.)

52,667 x 5

452 x 41

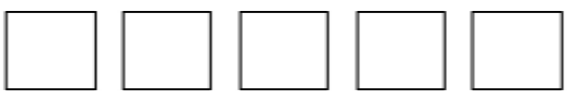
3. Do the following divisions. Show your work. (Do not use a calculator.)

1524 ÷ 6

380 ÷ 10

4235 ÷ 10

4. Shade 3/5 of the boxes below:

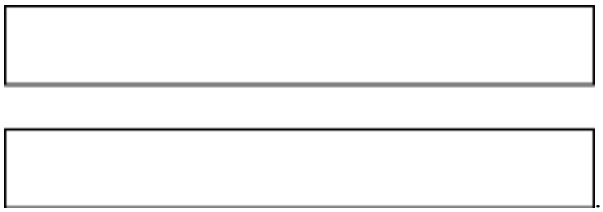


5. Place these two fractions on the two number lines below to show why they are equivalent.

$\frac{6}{8}$ $\frac{3}{4}$

6. Show how these two fractions are equal by shading some of each rectangle.

$\frac{1}{2}$ $\frac{2}{4}$



7. Explain how these two fractions are equal.

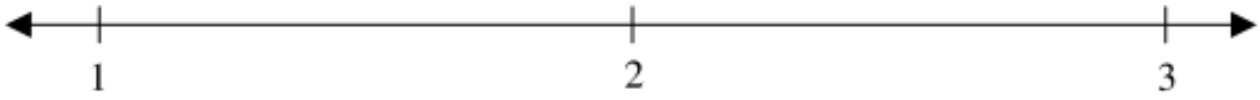
$\frac{1}{3}$ $\frac{2}{6}$

You may use fraction bars or number lines to illustrate your explanation.

8.

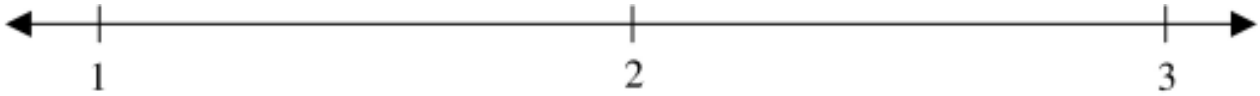
Locate these two fractions on the number line, label each, then explain which is larger.

$2\frac{7}{12}$ $\frac{11}{4}$



9. Locate and label these two fractions on the number line. Then tell which is larger.

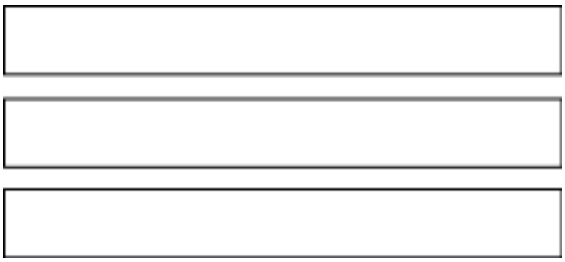
$2\frac{1}{2}$ $\frac{3}{2}$



Which is larger? _____

10. On the strips below, shade and label the following fractions.

. $\frac{2}{3}$ $\frac{4}{6}$ $\frac{8}{12}$



Explain what your drawing shows about the relationship these fractions.

.

11. Explain the relationship between eighths and fourths. Draw a picture to aid your explanation.

12.

Locate and label this fraction on the number line. Then write it as a mixed number:

$\frac{5}{4}$

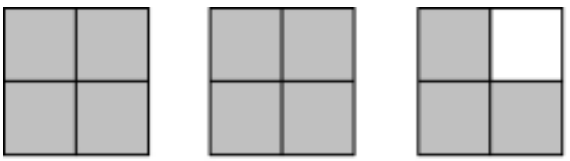
13. Write a mixed number between 0 and 2. Show where it is on the number line.

Write an improper fraction that is equivalent to the mixed number.

14. Write this fraction as a mixed number. Then create a picture that represents it as a mixed number:

$$\frac{13}{3}$$

15. Identify the shaded portion of this picture as a mixed number and an improper fraction.



= _____ = _____

16. Write the following fractions in order from least to greatest:

$$\frac{11}{3} \quad \frac{1}{6} \quad 1\frac{2}{3}$$

17. Write the following fractions in order from greatest to least.

$$1\frac{1}{4} \quad \frac{3}{4} \quad \frac{9}{4}$$

18. Solve the following problems:

$$\frac{3}{4}+\frac{2}{4}=$$

$$\frac{3}{4}-\frac{2}{4}=$$

$$\frac{8}{12}-\frac{1}{4}=$$

$$\frac{8}{12}+\frac{1}{4}=$$

19. Using a ruler and a tool or object with a square (90^o) corner, draw and label all of the following:

A pair of intersecting lines that are not perpendicular.

A pair of perpendicular lines.

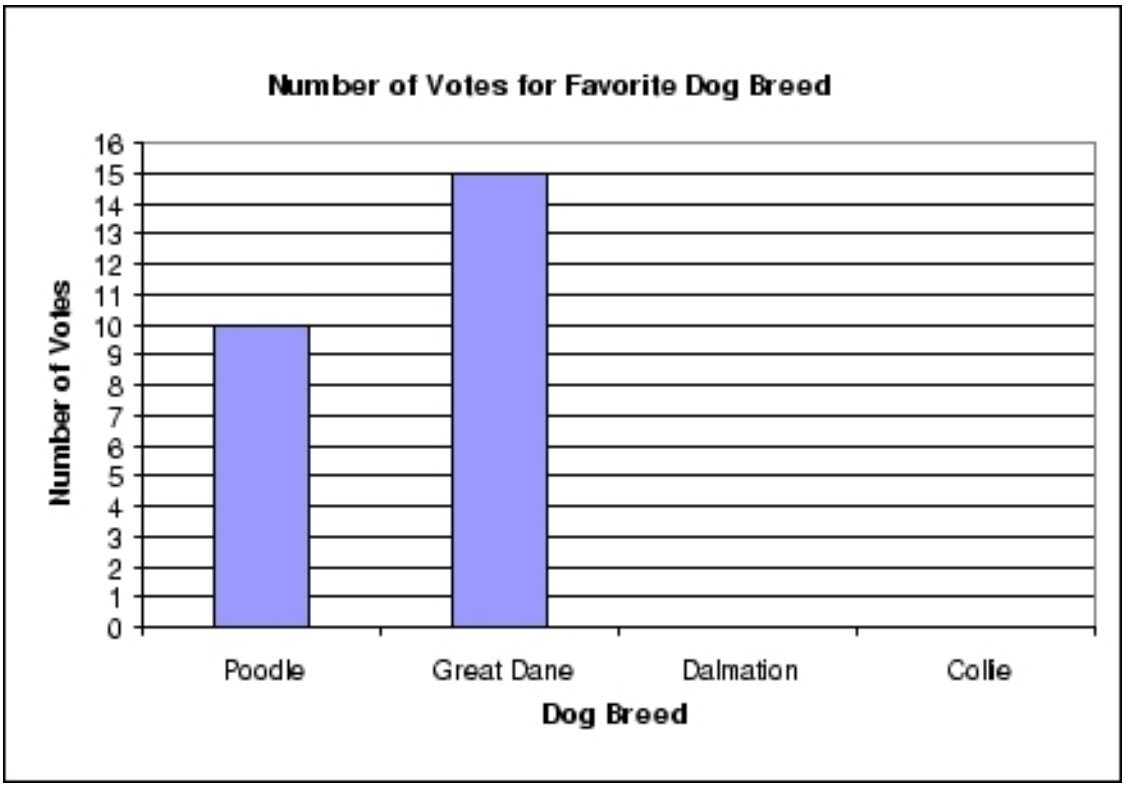
A pair of parallel lines.

20.

Use the data in the table to complete the graph.

Votes for Favorite Dog Breeds

Breed	Number of Votes
Poodle	10
Great Dane	15
Dalmation	12
Collie	8



21. Adam is saving for a pair of skates. The first week he saves $4, at the end of the second week, he has $8. After the third week, he has $12. If the pattern continues how much will Adam have at the end of the 8th week? Show how you would prove this.

MMLA Mathematics Assessment Items
Answer Key

Multiple Choice

Item No.	Correct Answer	GLCE	MEAP Code
1	D	N.ME.04.04	ext
2	D	N.ME.04.05	core
3	B	N.ME.04.05	core
4	C	N.ME.04.05	core
5	A	N.ME.04.05	core
6	D	N.MR.04.06	ext
7	C	N.MR.04.07	core
8	B	N.MR.04.07	core
9	C	N.MR.04.07	core
10	B	N.FL.04.08	ext
11	A	N.FL.04.08	ext
12	C	N.ME.04.09	core
13	B	N.ME.04.09	core
14	C	N.FL.04.10	ext
15	D	N.FL.04.10	ext
16	B	N.FL.04.11	core
17	C	N.FL.04.11	core
18	A	N.FL.04.11	core
19	B	N.FL.04.11	core
20	B	N.FL.04.11	core
21	D	N.FL.04.12	core
22	D	N.FL.04.12	core
23	B	N.FL.04.12	core
24	D	N.FL.04.12	core
25	C	N.MR.04.13	fut
26	D	N.MR.04.14	ext
27	C	N.MR.04.14	ext

28	D	N.ME.04.15	core
29	B	N.ME.04.15	core
30	B	N.ME.04.15	core
31	D	N.ME.04.15	core
32	B	N.ME.04.16	fut
33	D	N.ME.04.17	ext
34	C	N.MR.04.19	core
35	A	N.MR.04.19	core
36	B	N.MR.04.19	core
37	A	N.ME.04.20	ext
38	C	N.ME.04.20	ext
39	C	N.ME.04.20	ext
40	C	N.ME.04.20	ext
41	B	N.MR.04.22	core
42	A	N.MR.04.23	ext
43	B	N.MR.04.23	ext
44	C	N.ME.04.24	fut
45	D	N.MR.04.25	ext
46	C	N.MR.04.26	ext
47	D	N.MR.04.27	fut
48	D	N.MR.04.27	fut
49	B	N.MR.04.28	fut
50	C	N.MR.04.29	fut
51	A	N.FL.04.33	fut
52	C	N.FL.04.33	fut
53	C	N.FL.04.34	ext
54	A	N.FL.04.34	ext
55	A	N.FL.04.34	ext
56	C	N.FL.04.35	core
57	D	N.FL.04.35	core
58	B	N.FL.04.36	NASL
59	B	N.FL.04.36	NASL

60	B	M.UN.04.01	core
61	C	M.UN.04.01	core
62	C	M.PS.04.02	core
63	C	M.UN.04.03	core
64	C	M.TE.04.05	ext
65	D	M.TE.04.05	ext
66	C	M.TE.04.06	core
67	A	M.TE.04.06	core
68	B	M.TE.04.07	core
69	C	M.TE.04.08	ext
70	C	M.TE.04.10	ext
71	A	M.TE.04.10	ext
72	B	M.TE.04.10	ext
73	C	M.TE.04.10	ext
74	B	G.GS.04.01	ext
75	A	G.GS.04.01	ext
76	B	G.GS.04.01	ext
77	C	G.GS.04.01	ext
78	A	G.GS.04.01	ext
79	B	G.GS.04.02	core
80	D	G.GS.04.02	core
81	B	G.SR.04.03	core
82	B	G.SR.04.03	core
83	D	G.SR.04.03	core
84	B	G.TR.04.04	ext
85	B	G.TR.04.04	ext
86	C	G.TR.04.05	core
87	C	D.RE.04.01	ext
88	A	D.RE.04.02	core
89	C	D.RE.04.02	core
90	B	D.RE.04.02	core
91	B	D.RE.04.02	core

92	D	D.RE.04.02	core
93	C	D.RE.04.02	core
94	A	D.RE.04.02	core
95	C	D.RE.04.03	core
96	A	D.RE.04.03	core
97	B	D.RE.04.03	core
98	B	D.RE.04.03	core

Open Ended

Item No.	Correct Answer	GLCE	MEAP Code
1	1 x 50; 2 x 25; 5 x 10	N.ME.04.04	ext
2	Use your calculator to check students' work. Look for specific computation errors if a student gets a wrong answer.	N.FL.04.10	ext
3	Use your calculator to check students' work. Look for specific computation errors if a student gets a wrong answer.	N.FL.04.11	core
4	3 of the 5 boxes should be shaded. Alternatively, a student could shade 3/5 of each box.	N.ME.04.20	ext
5	Both fractions are at the same place on the number line, half-way between 1/2 and 1. To locate 3/4, students should divide the number line between 0 and 1 into 4 sections, placing the fraction at the 3^{rd} mark. To locate 6/8, students should divide the number line between 0 and 1 into 8 sections, placing the fraction at the 6^{th} mark.	N.MR.04.21	ext
6	One strip can be divided into two equal parts, and one part shaded. The other strip can be divided into 4 equal parts, and two parts shaded. The shaded portions should line up to show the equivalence.	N.MR.04.21	ext
7	Fraction bars should show that 1 part out of 3 equal parts is the same as 2 parts out of 6 equal parts (as long as the fractions bars are the same length). On the number line, the length from 0 to 1 can be divided into 3 equal parts, or 6 equal parts, showing that 1/3 is at the same location as 2/6.	N.MR.04.21	ext
8	11/4 is located at 2 and 3/4, which is equivalent to 2 9/12. Therefore, 11/4 is larger than 2 7/12.	N.MR.04.22	core
9	3/2 is equivalent to 1 1/2, so 2 1/2 is larger.	N.MR.04.22	core
10	The are all equivalent. The drawings should show that 2 thirds, 4 sixths and 8 twelves are all the same amount. (The 2/3 drawing should be divided into 3 equal parts with 2 shaded; the 4/6 drawings should show 6 equal parts with 4 shaded, etc.)	N.MR.04.23	ext

11	The drawing should show that 1/4 is the same as 2/8, or that 1/8 is half of 1/4 (or some other equivalent relationship between them).	N.MR.04.23	ext
12	5/4 is equivalent to 1 1/4, located one mark beyond 1 (1/4 of the way from 1 to 2).	N.ME.04.24	fut
13	For example, if a student choses 1 1/2, the would locate it on the number line then write 3/2 (the equivalent improper fraction). Students should not choose a number between 0 and 1, since mixed numbers are defined as greater than 1.	N.ME.04.24	fut
14	13/3 is equivalent to 4 1/3.	N.MR.04.25	ext
15	The picture shows 2 3/4, which is equivalent to 11/4.	N.MR.04.25	ext
16	1/6, 1 2/3, 11/3 (3 2/3)	N.MR.04.26	ext
17	3/4, 1 1/4, 9/4 (2 1/4)	N.MR.04.26	ext
18	5/4 or 1 1/4; 1/4; 5/12; 11/12	N.MR.04.27	fut
19	To draw parallel lines, students will first have to draw perpendicular lines, then draw a third line perpendicular to one of the first two lines.	G.GS.04.01	ext
20	Students' bar graph should show 12 votes for Dalmations and 8 votes for Collies.	D.RE.04.01	ext
21	$32. Students might create a table to prove their answer.	D.RE.04.01	ext