

Name: \_\_\_\_\_



Date: \_\_\_\_\_

### Beginning of Year Assessment

1. Jason uses  and  to make a new figure.

Which new figure does he make?

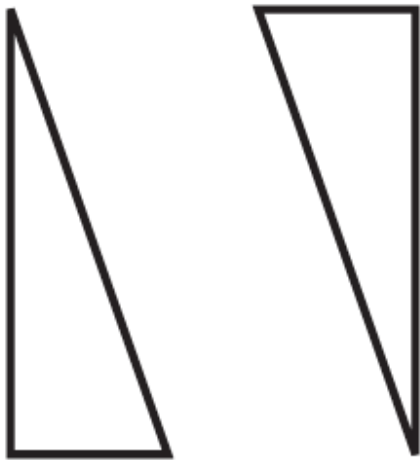
- a. circle       b. triangle       c. trapezoid       d. rectangle

2. Frankie uses 2  and 1  to make a new figure.

Which figure does he make?

- a. trapezoid       b. square       c. pentagon       d. triangle

3. Pat puts these two figures together. Which new figure does she make?



- a. triangle       b. rectangle       c. circle       d. square

4. Choose the related addition fact for  $3 + 2 = 5$ .

- a.  $2 + 3 = 5$        b.  $3 + 2 = 4$        c.  $3 + 2 = 5$        d.  $5 + 0 = 5$

5. Which related addition fact can you use to find the difference?

$$\begin{array}{r} 8 \\ -4 \\ \hline \end{array}$$

a. 
$$\begin{array}{r} 4 \\ +4 \\ \hline 8 \end{array}$$

b. 
$$\begin{array}{r} 8 \\ +4 \\ \hline 12 \end{array}$$

c. 
$$\begin{array}{r} 4 \\ +8 \\ \hline 12 \end{array}$$

d. 
$$\begin{array}{r} 5 \\ +3 \\ \hline 8 \end{array}$$

6. Which related addition fact can you use to find the difference?

$$11 - 8 = \underline{\quad ? \quad}$$

a.  $2 + 9 = 11$

b.  $3 + 8 = 11$

c.  $11 - 3 = 8$

7. Which number will make the number sentence true?

$$3 + \underline{\quad} = 13$$

a. 10

b. 12

c. 9

8. Which subtraction fact would you use to find the missing addend?

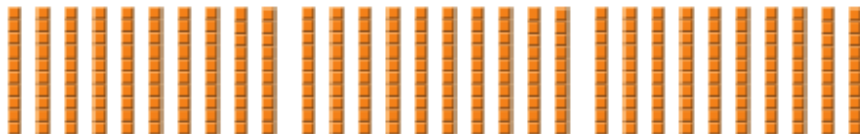
$$7 + \underline{\quad ? \quad} = 11$$

a.  $11 - 7 = 4$

b.  $4 + 7 = 11$

c.  $7 - 4 = 3$


9. Group 10 tens to make hundreds. How many hundreds?



a. 3


b. 10

c. 30

10. Tony has 4 .

Mel has 3 .

Sue has 4 .

How many  do they have in all?

a. 7

b. 11

c. 10

d. 12



16. Which shape is **not** a polygon?

a.



b.



c.



d.



17. Which is the best estimate for the liquid volume of a teaspoon?

a. about 5 milliliters

b. about 50 milliliters

c. about 5 liters

d. about 50 liters

18. About how much liquid is in a teaspoon?

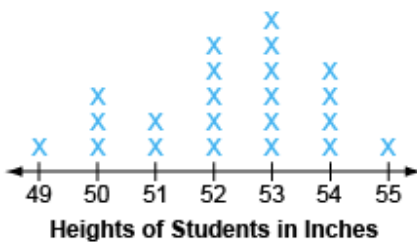
a. about 5 mL

b. about 50 mL

c. about 5 L

d. about 50 L

**Use the line plot to answer the question.**



19. What is the mode for the heights of the students?

a. 49

b. 52

c. 53

d. 55

20. What is the range for the heights of the students?

a. 6

b. 5

c. 49

d. 55

21. A rectangular rug is 9 feet long and 2 feet wide. What is the area of the rug?

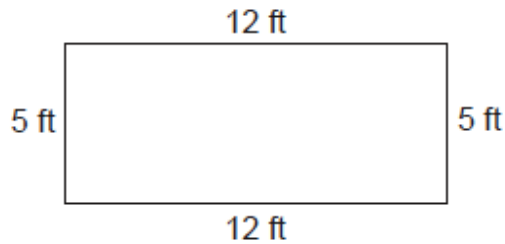
a. 18 square feet

b. 11 square feet

c. 22 square feet

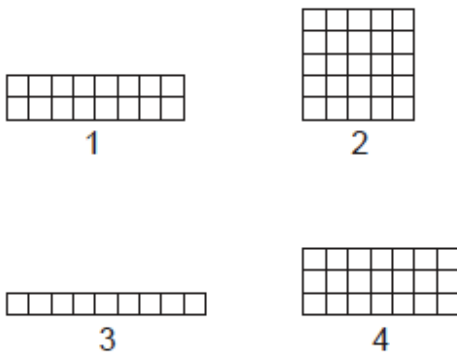
d. 92 square feet

22. Linda is tiling her kitchen floor. The diagram shows the rectangular floor. Each tile has an area of 1 square foot. How many tiles are needed to cover the kitchen floor?



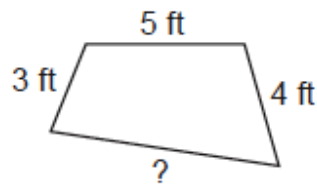
- a. 12       b. 17       c. 50       d. 60

23. All of these figures have the same perimeter. Which figure has the greatest area?



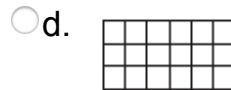
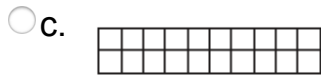
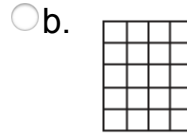
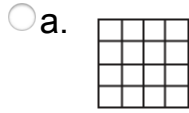
- a. Figure 3       b. Figure 1       c. Figure 2       d. Figure 4

24. Audrey builds a fence for one side of her garden with an unknown length. The perimeter of the garden is 19 feet. How long will the fence be?



- a. 7 feet       b. 9 feet       c. 12 feet       d. 19 feet

25. This figure has an area of 20 square units and a perimeter of 18 units. Which figure has the same area, but a different perimeter?



26. What is 12,375 rounded to the nearest hundred?

- a. 12,380       b. 12,400       c. 12,000       d. 10,000

27. Use the Associative Property of Addition. What is the missing addend?

$$86 + 49 = (80 + 6) + (\underline{\quad} + 9)$$

- a. 4       b. 14       c. 40       d. 10

28. A fabric store sells 312 yards of red fabric and 448 yards of blue fabric. How many more yards of blue fabric are sold?

- a. 100       b. 134       c. 146       d. 136

29. Use front-end estimation to estimate the product. Which is the best estimate?

$$\begin{array}{r} \$4.39 \\ \times \quad 3 \\ \hline \end{array}$$

- a. about \$4.00       b. about \$7.00       c. about \$12.00       d. about \$15.00

30. Use a basic fact and patterns to find the missing product.

$$2 \times 5 = 10$$

$$2 \times 50 = 100$$

$$2 \times 500 = 1,000$$

$$2 \times 5,000 = ?$$

Which is the missing product?

a. 2,000

b. 1,000

c. 20,000

d. 10,000

31. Chris uses addition to find the product  $4 \times 30 = 120$ .

$$4 \times 30 =$$

$$(4 \times \underline{\quad}) + (4 \times \underline{\quad}) + (4 \times \underline{\quad})$$
$$40 \quad + \quad 40 \quad + \quad 40$$

$$4 \times 30 = 120$$

Which number goes in each blank?

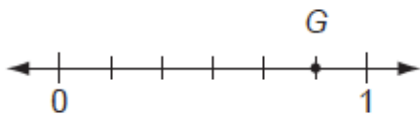
a. 10

b. 20

c. 30

d. 40

32. Which fraction is shown by point  $G$  on this number line?



a.  $\frac{1}{4}$

b.  $\frac{1}{6}$

c.  $\frac{4}{6}$

d.  $\frac{4}{7}$

33. Which lists the fractions in order from greatest to least?

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

a.  $\frac{2}{6}$

b.  $\frac{2}{4}$

c.  $\frac{2}{6}$

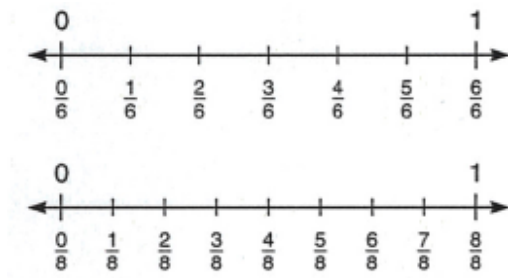
d.  $\frac{2}{3}$

34. Which lists the fractions in order from least to greatest?

$$\frac{5}{9} \quad \frac{2}{9} \quad \frac{7}{9}$$

- a.  $\frac{7}{9}$ ,  $\frac{5}{9}$ ,  $\frac{2}{9}$     
 b.  $\frac{7}{9}$ ,  $\frac{2}{9}$ ,  $\frac{5}{9}$     
 c.  $\frac{5}{9}$ ,  $\frac{7}{9}$ ,  $\frac{2}{9}$     
 d.  $\frac{2}{9}$ ,  $\frac{5}{9}$ ,  $\frac{7}{9}$

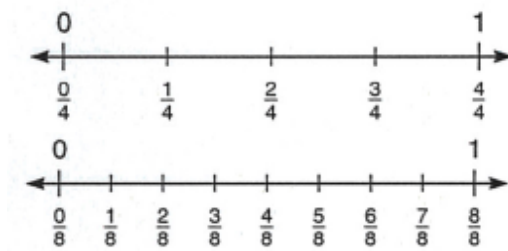
35. Use the number lines to compare the two fractions. Which symbol makes the expression true?



$$\frac{4}{6}$$

- a. <    b. =    c. >

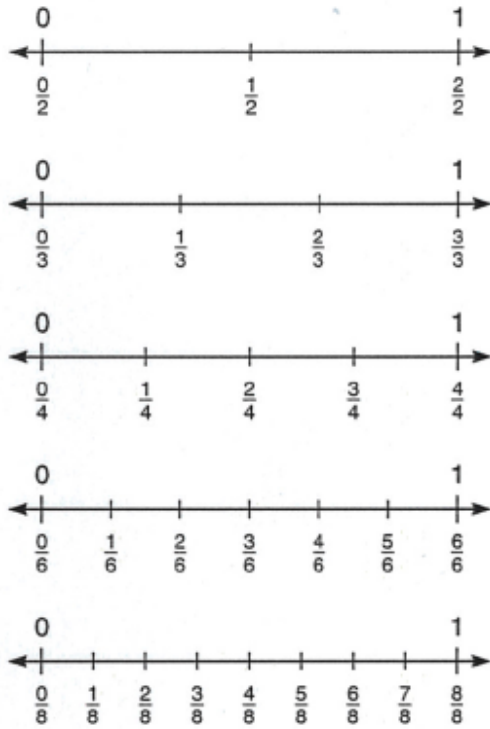
36. Which fraction is equivalent to  $\frac{1}{4}$ ?



- a.  $\frac{1}{8}$     b.  $\frac{2}{8}$     c.  $\frac{3}{8}$     d.  $\frac{4}{8}$



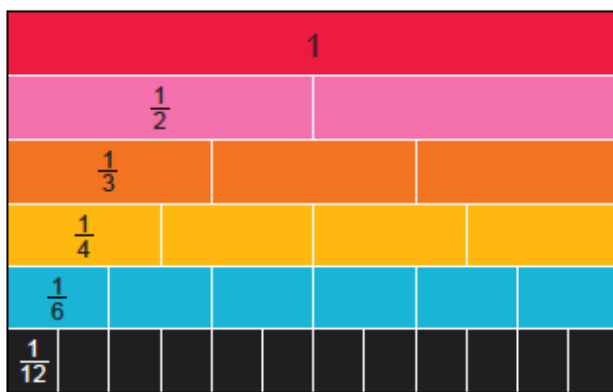
37. Use the number lines to answer the question.



Brian has read  $\frac{2}{3}$  of his book. Dinah has read an equivalent fraction of her book. Which fraction tells what part of her book Dinah has read?

- a.  $\frac{4}{6}$                      
  b.  $\frac{4}{3}$                      
  c.  $\frac{2}{6}$                      
  d.  $\frac{4}{9}$

38. Use the fraction strips to answer the question.



Which number is missing in the equivalent fractions?

- a. 1                     
  b. 2                     
  c. 3                     
  d. 6

39. The math club has 12 members. Six of the members are in the third grade. Which fraction describes how many math club members are in the third grade?
- a.  $\frac{6}{2}$        b.  $\frac{2}{12}$        c.  $\frac{1}{2}$        d.  $\frac{6}{1}$
40. Which fraction is equivalent to  $\frac{4}{6}$ ?
- a.  $\frac{2}{3}$        b.  $\frac{1}{2}$        c.  $\frac{6}{4}$        d.  $\frac{6}{8}$
41. There are 12 flowers in a bouquet. Danny says  $\frac{12}{12}$ ?
- a.  $\frac{12}{1}$        b.  $\frac{1}{12}$        c. 12       d. 1
42. Which fraction is equivalent to 1?
- a.  $\frac{1}{2}$        b.  $\frac{5}{5}$        c.  $\frac{5}{1}$        d.  $\frac{2}{5}$
43. There are 3 basketball teams. Each team has 8 players. There are 2 more soccer teams than basketball teams. Each soccer team also has 8 players. How many soccer players are there?
- a. 8       b. 13       c. 40       d. 24
44. Marco bakes 7 apple pies for the fair. He uses 9 apples to make each pie. How many apples does Marco use in all?
- a. 7       b. 16       c. 63       d. 70
45. Will and Sherry each draw an array. Will draws 4 rows with 5 objects in each row. Sherry draws 5 rows with 4 objects in each row. Which statement is true?
- a. Will draws more objects.       b. Sherry draws more objects.  
 c. They each draw 20 objects.
46. A group of 15 people are going on a boat trip. They rent 3 boats. The same number of people will ride in each boat. How many people will ride in each boat?
- a. 3       b. 12       c. 15       d. 5

47. Which is the missing dividend?

$$\underline{\quad} \div 8 = 7$$

- a. 15                       b. 56                       c. 7                       d. 48

48. Which is the missing factor?

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

- a. 3                       b. 4                       c. 1                       d. 2

49. The store displays packages of pencils on 3 hooks. Each hook holds 5 packs of pencils. There are 2 pencils in each pack. How many pencils does the store display? Use the grouping to find the product.

$$3 \times (5 \times 2) =$$

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

- a.  $3 \times 7 = 21$                        b.  $3 \times 10 = 13$                        c.  $3 \times 5 = 15$                        d.  $3 \times 10 = 30$

50. Which shows how to use the Distributive Property to find the product of  $7 \times 9$ ?

- a.  $7 \times 9 = (7 \times 3) + (7 \times 3)$                        b.  $7 \times 9 = (7 \times 5) + (7 \times 4)$   
 c.  $7 \times 9 = (7 \times 4) + (7 \times 2)$                        d.  $7 \times 9 = (7 \times 2) + (7 \times 5)$

51. Find the product. Use the grouping shown.

$$2 \times (5 \times 2) =$$

$$2 \times 10 = ?$$

- a. 20                       b. 12                       c. 10                       d. 9

52. Meghan used the numbers 8, 6, and 48 to write a fact family. Which fact is missing?

$$48 \div 8 = 6$$

$$8 \times 6 = 48$$

$$6 \times 8 = 48$$

- a.  $8 \div 48 = 6$                        b.  $48 \div 6 = 8$                        c.  $6 \div 48 = 8$                        d.  $48 \div 8 = 8$

53. Maria has 12 buttons and 4 boxes. She puts the same number of buttons in each box. How many buttons does Maria put in each box?

- a. 3                       b. 4                       c. 8                       d. 16

54. Which is the related multiplication fact?

$$18 \div 3 = 6$$

- a.  $18 \times 3 = 54$        b.  $6 \times 3 = 18$        c.  $9 \times 2 = 18$        d.  $3 \times 3 = 9$

55. Kevin wants to pick 800 green beans. He picks 243 beans this morning. This afternoon he has picked 333 beans. How many more beans must he pick?

- a. 576                       b. 224                       c. 557                       d. 243

56. A rectangular swimming pool is 10 meters long. Its width is 8 meters shorter than its length. What is the perimeter of the swimming pool?

- a. 18 meters               b. 24 meters               c. 56 meters               d. 36 meters

57. Freddie buys 6 pairs of socks. How many socks are there in all?

- a. 6                               b. 10                               c. 2                               d. 12

58. Grace buys 7 bags of oranges. Each bag has 5 oranges. How many oranges does Grace buy?

- a. 5                               b. 20                               c. 30                               d. 35

59. Niko's class is painting scenery for the school play. They paint the scenery for 3 weeks. How many days do they paint scenery?

*Hint: 1 week = 7 days*

- a. 21                               b. 10                               c. 3                               d. 18

60. Gabe has 9 pens. He buys 4 more.  
Gabe gives 7 pens to a friend.  
How many pens does Gabe have left?

- a. 2                               b. 13                               c. 11                               d. 6

61. Use a multiplication model that works best for you.

Each day Melissa reads for 3 hours. How many hours does she read in 3 days?

a. 3

b. 6


c. 9

d. 12


62. What is the sum?

$$3 + 7 + 2$$

---

63. Rae has 8 .

Some  are in a bag.

Eight  are on a plate.


How many  are in a bag?

$$\underline{\quad} + 8 = 8$$

64. Kevin has 15 .

He gives some of them to Sarah.

Kevin has 9  left.

How many  does Kevin give to Sarah?

---

65. David has 10 boxes of books.

Each box has 10 books.

How many books does David have in all?

---

66. You have 60 tens.  
How many hundreds do you have?

60 tens = \_\_\_\_ hundreds

67. What number completes the number sentence?

\_\_\_\_ tens = 9 hundreds

68. Solve. Use the count on to make the nearest ten strategy.

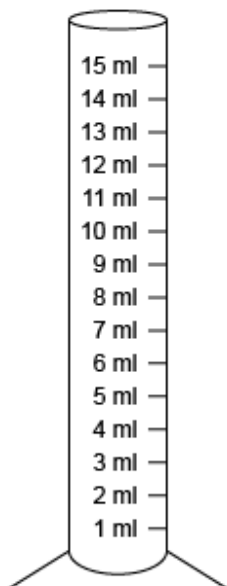
Plane A has 58 passengers.

Plane B has 34 passengers.

How many passengers are there in all?

---

69. A beaker has a volume of 15 milliliters. Mrs. Jones puts 5 milliliters of water in the beaker. How many more milliliters of water does she need to add to fill the beaker? Use the picture to help you solve the problem.



---

70. What is the area of the rectangle?



\_\_\_\_ square units

71. What is 2,547 rounded to the nearest thousand?

\_\_\_\_\_

72. Estimate the difference by rounding to the nearest hundred.

$$\begin{array}{r} 979 \\ - 344 \\ \hline \end{array}$$

\_\_\_\_\_

73. What is the difference?

$$51 - 48 = \underline{\quad}$$

74. Mr. Sanchez volunteers 2 days a week for 4 weeks. He volunteers 8 hours each day. How many hours does Mr. Sanchez volunteer?

\_\_\_\_\_

75. What is the missing factor?

$$6 \times \underline{\quad} = 30$$

76. What is the missing factor?

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