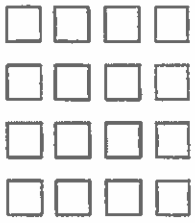
Name:_____

Date:_____

1 Which multiplication sentence is shown by the array?



A $4+4=8$
B $3\times4=12$
C $4\times4=16$
D $4\times5=20$

2 Which number makes the number sentence true?

$6\times8=\square\times6$

A 0
B 1
C 6
D 8

3 Spiders are a type of arachnid. Arachnids normally have 8 legs. How many legs would you count on 3 spiders?

A 24 legs
B 32 legs
C 36 legs
D 40 legs

4 Which multiplication fact can help you find 24 ÷ 6?

A 4×2
B 6×4
C 6×5
D 6×6

5 What three numbers complete the pattern?

9, 12, 15, 18, __, __, __

A 16, 14, 12
B 15, 12, 9
C 20, 22, 24
D 21, 24, 27

6 Brad is making costumes for the school play. The list below shows the total yards of cloth he used after making each costume.

18, 24, 30, 36

How many yards of cloth will he have used after he makes one more costume?

A 42
B 48
C 49
D 54

7 What is the value of the 4 in 743,279?

A 400
B 4,000
C 40,000
D 400,000

8 Round 232,832 to the nearest ten thousand.

A 220,000
B 230,000
C 240,000
D 300,000

9 Estimate by rounding to the nearest hundred.

765 – 134

A 500
B 600
C 700
D 800

10 Trisha estimated 5,409 + 2,945 by rounding each number to the nearest thousand. What did she add?

A 4,000 + 3,000
B 5,000 + 3,000
C 5,000 + 2,000
D 6,000 + 3,000

11 Subtract.

$$\begin{array}{r} 527 \\ -\ 362 \\ \hline \end{array}$$

A 65
B 122
C 155
D 165

12 Complete this statement. To find 4×600, multiply 4 and 6. Then write ____zeros at the end.

A 2
B 3
C 10
D 24

13 A factory can produce about 76 computers in 1 day. What is a reasonable estimate of the number of computers the factory can produce in 3 days?

A 240 because 3×76 is about $3 \times 80 = 240$
B 270 because 3×76 is about $3 \times 90 = 270$
C 210 because 3×76 is about $3 \times 70 = 210$
D 180 because 3×76 is about $3 \times 60 = 180$

14 Find the product.

$5 \times 37 = n$

A $n = 185$
B $n = 195$
C $n = 205$
D $n = 150$

15 A jumbo jet is traveling at a speed of 540 miles per hour. At this speed, how far will the jet travel in 6 hours?

A 1,260 miles
B 3,240 miles
C 3,204 miles
D 204 miles

16 The chart below shows the amount of calcium in one cup of cooked vegetables.

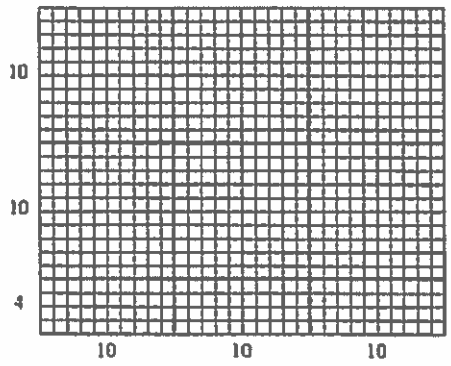
CALCIUM IN VEGETABLES

Vegetable (1 cup)	Calcium (milligrams)
Beets	26 mg
Broccoli	94 mg
Carrots	48 mg
Peas	34 mg
Sweet Potatoes	56 mg

How much calcium is in 3 cups of broccoli?

A 78 mg
B 102 mg
C 282 mg
D 292 mg

17 This array shows 24 rows of 30 squares.



Which is a way to find the total number of squares?

A 400+120
B 10+10+4+10+10+10
C (20×30) + (4×30)
D 300+240

18 In a class, 30 students will present their science projects. Each student gets to talk for 15 minutes. How much time is needed to present all the science projects?

A 1350 minutes
B 460 minutes
C 450 minutes
D 45 minutes

19 Estimate by rounding to the nearest ten.

56 x 23

A 2,100
B 1,200
C 200
D 120

20 There are 25 plastic forks in a package of plasticware. How many forks are in 20 packages?

A 50 forks
B 500 forks
C 5,000 forks
D 50,000 forks

21 Multiply.

$$\begin{array}{r} 84 \\ \times\ 87 \\ \hline \end{array}$$

A 7,408
B 6,308
C 7,308
D 7,221

22 Multiply.

$$\begin{array}{r} 81 \\ \times\ 85 \\ \hline \end{array}$$

A 6,985
B 5,885
C 6,885
D 6,970

23 A 8-car train holds a total of 480 luggage bags. If the same number of luggage bags travel in each car, how many will each car hold?

A 6 luggage bags
B 7 luggage bags
C 60 luggage bags
D 70 luggage bags

24 Helen's older sister wants to buy a car that costs $3,480. She earns $9 for every hour she works. About how many hours must she work to earn enough money to buy the car?

A 400
B 500
C 600
D 700

25 Divide.

$5\overline{)18}$

A 1 R3
B 2 R6
C 3 R1
D 4 R1

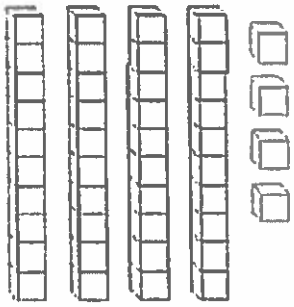
26 How many 5s are there in 50?

A 10
B 11
C 13
D 16

27 Rick has 72 plums. If he can put 8 plums in each bag, how many bags will he need?

A 7
B 9
C 10
D 11

28 A group of friends are playing a board game. As part of the game, each player is given the same number of cards. There are 7 players and 44 cards. How many cards will each player get if each player gets the same number of cards?



A Each player will get 8 cards. There will be 0 cards left over.
B Each player will get 7 cards. There will be 0 cards left over.
C Each player will get 6 cards. There will be 6 cards left over.
D Each player will get 6 cards. There will be 2 cards left over.

29 Divide. Check your answer.

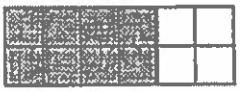
$7\overline{)155}$

A 23
B 22 R1
C 22
D 6 R8

30 Which shows all the factors of 24?

A 2, 3, 4, 6, 8, 12, 24
B 1, 2, 3, 4, 6, 8, 12, 24
C 1, 2, 5, 4, 6, 8, 12, 24
D 2, 3, 4, 6, 8, 12, 24, 36

31 Which fraction is equivalent to the area of the rectangle that is not shaded?



A $\frac{1}{3}$
B $\frac{4}{8}$
C $\frac{2}{3}$
D $\frac{3}{12}$

32 Fred sprinted $\frac{1}{8}$ mile, jogged $\frac{3}{8}$ mile, and then sprinted another $\frac{3}{8}$ mile. What was his total distance?

A $\frac{7}{8}$ mile

B $\frac{7}{24}$ mile

C $1\frac{3}{8}$ miles

D $3\frac{1}{24}$ miles

33 Subtract.

$\frac{8}{12} - \frac{5}{12}$

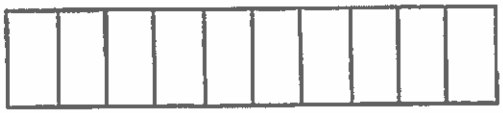
A $\frac{1}{3}$

B $\frac{3}{12}$

C $\frac{4}{12}$

D $\frac{12}{12}$

34 Seven out of 10 balls in a pail are white. What is this amount written as a fraction?



A $\frac{3}{10}$

B $\frac{7}{100}$

C $\frac{7}{10}$

D $\frac{10}{7}$

35 Which decimal is equivalent to $\frac{4}{20}$?

A 0.8
B 0.20
C 0.12
D 0.25

36 Which is the most appropriate unit to measure the length of a spoon?

A inch
B yard
C mile
D feet

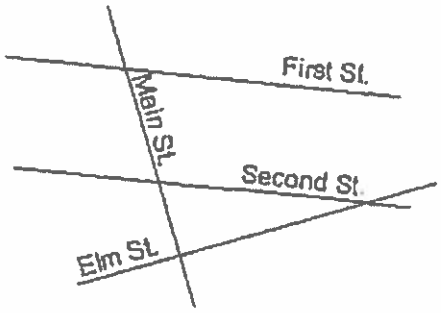
37 Which is longer, a 15-cm or a 1-dm marker?

A 1-dm marker
B 15-cm marker
C They are the same length.
D There is not enough information to tell.

38 Amy made a rectangular blanket that had a perimeter of 28 feet. It was 9 feet long. How wide was it?

A 5 feet
B 6 feet
C 9 feet
D 10 feet

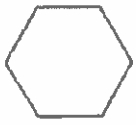
39 This is part of a city map.

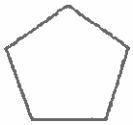


Which streets are parallel to each other?

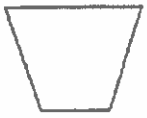
A Second Street and Main Street
B First Street and Second Street
C Elm Street and Main Street
D None of the streets are parallel to one another.

40 Which polygon is a hexagon?

A 

B 

C 

D 

Grade 5 Beginning of Year Diagnostic Test Test

Name:_____

Date:_____

1 What is the value of the 5 in 517,264?

A 500
B 5,000
C 50,000
D 500,000

2 What is 1,000 + 700 + 20 + 3 written in standard form?

A 1,723
B 1,273
C 7,123
D 2,173

3 Tell the value of the underlined digit in 354.85.

A eight ones
B eight tens
C eight tenths
D eight hundredths

4 Which number is equal to 2.60?

A 2.06
B 2.6
C 2.66
D 2.0

5 Mr. Escano was born in 1964. In what year was Mr. Escano 28 years old? Use mental math to solve.

A 1982
B 1984
C 1992
D 1994

6 What number makes the sentence true?

300 + ___ + 0 = 500

A 2
B 20
C 200
D 1,400

7 In 35 ÷ 7 = 5, what is the 7 called?

A dividend
B divisor
C quotient
D factor

8 Round 6,429,832 to the nearest ten thousand.

A 6,410,000
B 6,419,000
C 6,430,000
D 6,000,000

9 Estimate the quotient of 115 ÷ 3.

A 120
B 80
C 40
D 30

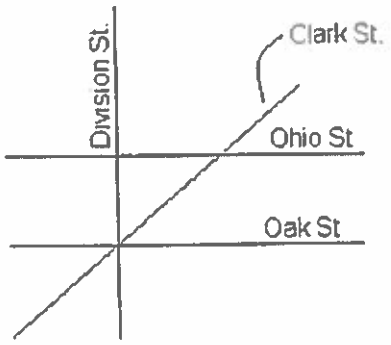
10 There are 700 plastic forks in a package. How many plastic forks are in 20 packages?

A 1,400 plastic forks
B 14,000 plastic forks
C 140,000 plastic forks
D 1,400,000 plastic forks

11 Eric has 100 yards of wire that he is using to make some ornaments. Each ornament requires 7 yards of wire. If Eric makes as many ornaments as possible, how many ornaments will he make? How many yards of wire will be left?

A 14 ornaments with 0 yards left over
B 14 ornaments with 2 yards left over
C 14 ornaments with 6 yards left over
D 13 ornaments with 8 yards left over

12 This is part of a city map.



Which streets are parallel to each other?

A Oak St. and Ohio St.
B Ohio St. and Division St.
C Oak St. and Clark St.
D None of the streets are perpendicular to one another.

13 Eight classes from Thompson Middle School collected a total of 4,576 books for the library book sale. If each class collected the same number of books, how many did each class collect?

A 560 books
B 562 books
C 570 books
D 572 books

14 Which improper fraction does NOT equal a whole number?

A $\frac{18}{2}$

B $\frac{24}{3}$

C $\frac{32}{4}$

D $\frac{59}{5}$

15 Which fraction equals $\frac{11}{24} - \frac{7}{24}$?

A $\frac{1}{6}$

B $\frac{2}{3}$

C $\frac{7}{24}$

D $\frac{3}{4}$

16 Ants are a type of insect. Insects normally have 6 legs. How many legs would you count on 4 ants?

A 36 legs
B 24 legs
C 10 legs
D 2 legs

17 What is the name of a polygon with 5 vertices?

A octagon
B quadrilateral
C hexagon
D pentagon

18 Which is the most appropriate unit to measure the weight of a feather?

A gallons
B tons
C ounces
D pounds

19 There are 13 cars in an amusement park ride. If each car holds 9 people, what is the total number of people the ride can hold?

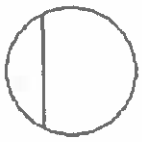
A 208 people
B 117 people
C 52 people
D 21 people

20 Which shows $\frac{1}{4}$ of the figure shaded?

A 

B 

C 

D 

21 Which group of numbers is listed from least to greatest?

A 2,394, 2,934, 3,924
B 3,924, 2,394, 2,934
C 2,934, 2,394, 3,924
D 2,394, 3,924, 2,934

22 Subtract.

$$\begin{array}{r} 735 \\ -\ 419 \\ \hline \end{array}$$

A 236
B 326
C 163
D 316

23 Marc has 8 dimes. How many cents does he have in all?

A 8¢
B 16¢
C 40¢
D 80¢

24 If you know that $9 \times 4 = 36$, which division fact do you know?

A $72 \div 2 = 36$
B $6 \div 6 = 1$
C $36 \div 3 = 12$
D $36 \div 9 = 4$

25 To subtract 230 – 72 using mental math, Frank subtracted 230 – 70 and got 160. What should he do next?

A Subtract 2.
B Subtract 8.
C Add 2.
D Add 8.

26 Divide.

$4\overline{)17}$

A 4 R2
B 4 R1
C 3 R5
D 3 R2

27 Which number sentence is TRUE?

A $35 \times 20 = 7{,}000$
B $35 \times 200 = 7{,}000$
C $35 \times 2{,}000 = 7{,}000$
D $35 \times 20{,}000 = 7{,}000$

28 Which quadrilateral always has only 1 pair of parallel sides?

A rhombus
B trapezoid
C rectangle
D parallelogram

29 Find the product of 34 and 21.

A 694
B 714
C 743
D 1.61

30 What is $4\frac{2}{7}$ written as an improper fraction?

A $\frac{28}{7}$

B $\frac{30}{7}$

C $\frac{18}{7}$

D $\frac{15}{2}$

31 Which fraction is the least?

A $\frac{1}{9}$

B $\frac{1}{5}$

C $\frac{1}{2}$

D $\frac{1}{6}$

32 What are the factors of 36?

A 1, 36
B 1, 2, 18, 36
C 1, 2, 4, 9, 18, 36
D 1, 2, 3, 4, 6, 9, 12, 18, 36

33 What are the factors of 18?

A 1, 18
B 1, 2, 9, 18
C 1, 2, 3, 6, 9, 18
D 1, 2, 3, 4, 6, 9, 18

34 A newspaper subscription costs $48 for 8 weeks.

What is the cost per week?

A $384
B $48
C $8
D $6

35 Which of the following could best be measured in pounds?

A the weight of an orange
B the weight of a pencil
C the weight of a person
D the length of a driveway

36 A rectangle has a length of 8 m and an area of 56 m^2. How long is the width of the rectangle?

A 14 m
B 56 m
C 7 m
D 8 m

37 The science class will watch a movie that is 72 minutes long. The clock below shows the starting time. What time will the movie be over?

A 5:38
B 2:58
C 3:58
D 3:46

38 What is the missing number that makes the fractions equivalent?

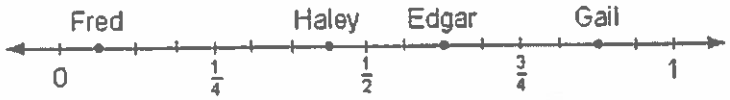
$$\frac{3}{5} = \frac{21}{?}$$

A 15
B 63
C 35
D 45

39 Jesse's family ate 0.8 of the steak he cooked on the barbecue. Which point on the number line best represents 0.8?

A *P*
B *Q*
C *R*
D *S*

40 Mr. Lapore had his students guess what fraction of an inch it would rain. Haley's guess was correct. Which number is best represented by Haley's guess on the number line?



A $\frac{1}{16}$ inch

B $\frac{7}{16}$ inch

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

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

Long Division with Multiples of 10 (A)

Find each quotient.

$70\overline{)4{,}130}$	$70\overline{)5{,}950}$	$40\overline{)1{,}800}$	$40\overline{)1{,}200}$
$60\overline{)1{,}320}$	$20\overline{)480}$	$20\overline{)780}$	$60\overline{)1{,}440}$
$70\overline{)5{,}320}$	$30\overline{)2{,}370}$	$80\overline{)5{,}840}$	$90\overline{)3{,}420}$
$40\overline{)920}$	$90\overline{)2{,}880}$	$50\overline{)1{,}800}$	$90\overline{)7{,}650}$

2-Digit by 1-Digit Multiplication (A)

Multiply to determine each product.

66 × 6	52 × 6	58 × 7	81 × 8	54 × 3	87 × 5	39 × 4	81 × 3
71 × 2	29 × 5	26 × 5	63 × 2	18 × 9	67 × 5	53 × 8	35 × 8
20 × 5	18 × 4	23 × 7	63 × 8	11 × 2	34 × 4	23 × 7	62 × 5
44 × 9	72 × 2	67 × 6	55 × 8	31 × 7	39 × 7	95 × 6	63 × 4
90 × 9	89 × 3	94 × 7	77 × 3	70 × 8	66 × 7	91 × 6	12 × 2
15 × 7	51 × 6	62 × 5	15 × 3	36 × 8	81 × 5	60 × 3	15 × 8

2-Digit by 1-Digit Multiplication (B)

Multiply to determine each product.

49 × 8	79 × 6	47 × 3	17 × 8	31 × 8	90 × 3	17 × 7	96 × 5
87 × 2	39 × 5	80 × 4	17 × 5	97 × 9	19 × 4	43 × 3	79 × 4
62 × 2	50 × 4	70 × 4	51 × 5	46 × 2	34 × 3	33 × 8	83 × 4
41 × 6	89 × 3	76 × 3	51 × 8	94 × 5	64 × 9	61 × 6	47 × 7
62 × 4	47 × 4	57 × 2	77 × 7	76 × 4	32 × 9	32 × 8	53 × 3
52 × 6	56 × 2	58 × 8	18 × 5	75 × 7	93 × 5	55 × 3	25 × 8