

Section 1:

Express number in word form:

1. 6,257 six thousand, two hundred fifty-seven
2. 8,540 eight thousand, five hundred forty
3. 7,601 seven thousand, six hundred one

Add. Use mental math.

4. $28 + 56 = \underline{84}$ $\begin{array}{r} 28 \\ +56 \\ \hline 84 \end{array}$
5. $34 + 49 = \underline{83}$ $\begin{array}{r} 34 \\ +49 \\ \hline 83 \end{array}$ \rightarrow $\begin{array}{c} (49) \\ (1) \end{array}$ so, $50 + 33 = 83$
6. $17 + 67 = \underline{84}$ $\begin{array}{r} 17 \\ +67 \\ \hline 84 \end{array}$
7. $58 - 47 = \underline{11}$ $\begin{array}{r} 58 \\ -47 \\ \hline 11 \end{array}$
8. $155 - 53 = \underline{102}$ $\begin{array}{r} 155 \\ -53 \\ \hline 102 \end{array}$

Express number in expanded form:

9. 9,304 9,000 + 300 + 4
10. 3,052 3,000 + 50 + 2
11. 1,643 1,000 + 600 + 40 + 3

Order the numbers from least to greatest.

12. 9,143 9,034 9,134
9,034 9,134 9,143
13. 3,256 3,279 3,238
3,238 3,256 3,279
14. 7,425 7,429 7,420
7,420 7,425 7,429

Find each missing number.

15. 10 more than 2,863 is 2,873. Th, H T O
 2,863
16. 100 more than 829 is 929. 829
17. 1,000 less than 4,059 is 3,059. 4,059

Complete each number pattern.

18. 8,625 8,725 8,825 8,925 9,025
19. 862 962 1,062 1,162 1,262
20. 6,215 6,115 6,015 5,915 5,815

Solve.

21. A grocer sells 548 apples and 470 oranges.
 Estimate the number of fruits he sells altogether.

$$\begin{array}{r} 54\textcircled{8} \rightarrow 550 \\ \text{nearest} \\ 10: \quad + 470 \\ \hline 1,020 \end{array}$$

or

$$\begin{array}{r} 548 \rightarrow 500 \\ 470 \rightarrow +500 \\ \text{nearest} \\ 100: \quad 1,000 \end{array}$$

The grocer sells
about 1,020 or
 1,000 fruits altogether.

22. Circle the mystery number. Use the clues to help you.

118 96 61 47 54

- Clue 1: The digits in the number add up to a number greater than 10.
 Clue 2: If I count in steps of 2, I will get this number.

1. $9 + 6 = 15$, greater than 10.
2. 96 is an even number.

Section 2:

Subtract. Use mental math.

1. $94 - 32 = \underline{62}$ $\begin{array}{r} 94 \\ -32 \\ \hline 62 \end{array}$ \rightarrow $\begin{array}{l} (50) \\ (3) \end{array}$ $78 - 50 = 28$
2. $78 - 53 = \underline{25}$ $\begin{array}{r} 78 \\ -53 \\ \hline 25 \end{array}$ \rightarrow $\begin{array}{l} (53) \\ (3) \end{array}$ $28 - 3 = 25$
3. $72 + 25 = \underline{97}$ $\begin{array}{r} 72 \\ +25 \\ \hline 97 \end{array}$
4. $65 + 38 = \underline{103}$ $\begin{array}{r} 65 \\ +38 \\ \hline 103 \end{array}$
5. $51 - 19 = \underline{32}$ $\begin{array}{r} 51 \\ -19 \\ \hline 32 \end{array}$

Express number in standard form:

6. eight thousand, six hundred twenty-nine 8,629
7. four thousand, seven hundred thirty 4,730
8. seven thousand, ten 7,010

Solve.

9. $\begin{array}{r} 52 \\ \times 6 \\ \hline 312 \end{array}$ $52 \times 6 = \underline{312}$
10. $\begin{array}{r} 113 \\ \times 3 \\ \hline 339 \end{array}$ $113 \times 3 = \underline{339}$
11. $\begin{array}{r} 21 \\ \times 7 \\ \hline 147 \end{array}$ $21 \times 7 = \underline{147}$

Complete by rounding each value to nearest ten and hundred.

- | value | nearest ten | nearest hundred |
|-----------|----------------------------------|----------------------------------|
| 12. 139 | <u>139</u> \rightarrow 140 | <u>139</u> \rightarrow 100 |
| 13. 658 | <u>658</u> \rightarrow 660 | <u>658</u> \rightarrow 700 |
| 14. 1,099 | <u>1,099</u> \rightarrow 1,100 | <u>1,099</u> \rightarrow 1,100 |

15. What number is 500 less than 6,125? answer 5,625

$$\begin{array}{r} 6,125 \\ - 500 \\ \hline 5,625 \end{array}$$

16. Jesse bought a toy for \$28.

She paid \$19 more for a model car than she paid for the toy.

How much did Jesse pay in all?

- a. \$47 b. \$57 c. \$65 d. \$75

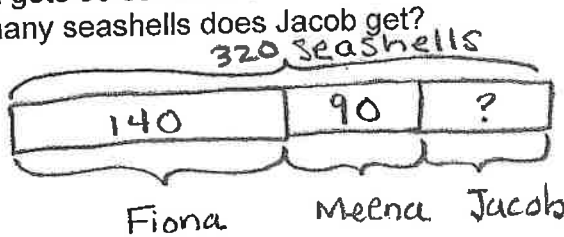
$$\begin{array}{r} \$28 \\ +19 \\ \hline \$47 \end{array} \quad \begin{array}{r} \$47 \\ +28 \\ \hline \$75 \end{array}$$

17. What is the smallest four digit number that can be formed with the digits 3, 8, 0, 7?

answer 3,078

Solve. Draw a bar model to help.

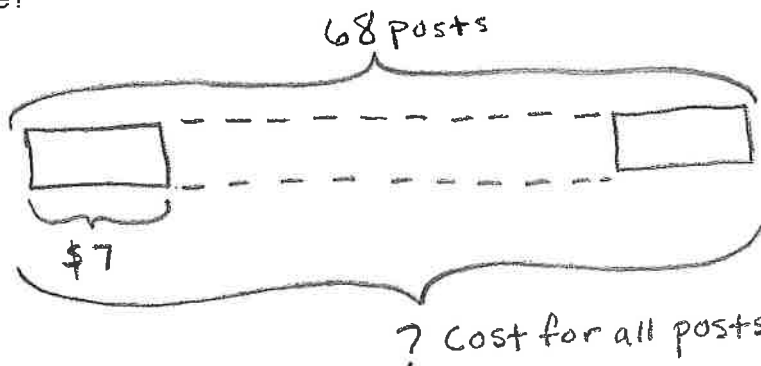
18. Meena, Fiona and Jacob share a total of 320 seashells.
Fiona gets 140 seashells.
Meena gets 90 seashells.
How many seashells does Jacob get?



$$\begin{array}{r} 140 \\ + 90 \\ \hline 230 \end{array} \quad \begin{array}{r} 320 \\ -230 \\ \hline 90 \end{array}$$

Jacob gets 90 seashells.

19. Mrs. Johnson buys 68 posts and some wire to make a fence. Each post costs \$7. The wire costs \$46. How much does Mrs. Johnson pay for the posts and the wire?



$$\begin{array}{r} 45 \\ 68 \\ \times 7 \\ \hline \$476 \end{array}$$

$$\begin{array}{r} \$476 \\ + 46 \text{ (wire)} \\ \hline \$522 \end{array}$$

Mrs. Johnson paid \$522 for the wires and posts.

Section 3:

Solve.

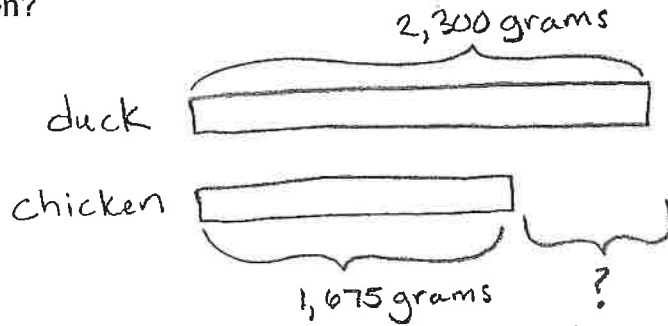
1. $635 + 249 = \underline{884}$ $\begin{array}{r} 635 \\ +249 \\ \hline 884 \end{array}$ $\begin{array}{r} 508 \\ +271 \\ \hline 779 \end{array}$

2. $508 + 271 = \underline{779}$ $\begin{array}{r} 3,684 \\ +2,700 \\ \hline 6,384 \end{array}$

3. The sum of 3,684 and 2,700 is $\underline{6,384}$.

Solve. Show your work and use bar models to help.

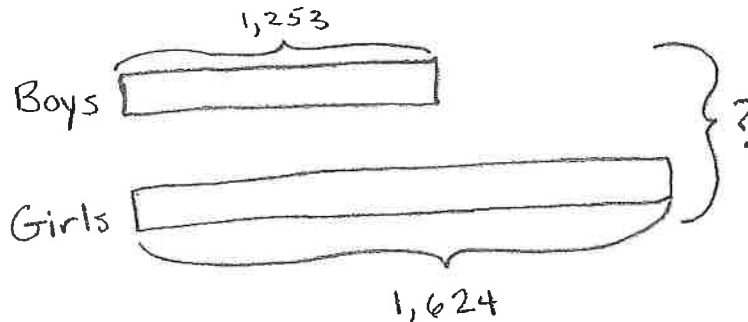
4. Mrs. Tan buys a duck and a chicken. The mass of the duck is 2,300 grams. The mass of the chicken is 1,675 grams. How much heavier is the duck than the chicken?



$$\begin{array}{r} 2,300 \\ -1,675 \\ \hline 625 \end{array}$$

The duck is 625 grams heavier than the chicken.

5. At Hillside Elementary School, there are 1,253 boys and 1,624 girls. How many students are there at the school?



$$\begin{array}{r} 1,253 \\ +1,624 \\ \hline 2,877 \end{array}$$

There are 2,877 students at Hillside Elementary school.

6. Complete the number pattern.

30 80 180 330 530

Pattern rule: increase by 50 more each time.

7. I am a 3-digit number that is less than 500.

My ones digit is twice the hundreds digit.

The sum of the three digits is 14.

What number am I?

284 because... $4 \times 2 = 8$
and, $8 + 2 = 10 + 4 = 14$

or 356

or 428

Answer: 284; 356; 428

8. $45 + 5 = \underline{\quad} - 100$. The missing number is 150.

a. 30

b. 70

c. 130

d. 150

$$\begin{array}{r} 45 + 5 = 150 - 100 \\ (50) \quad (50) \end{array}$$

9. In the number 8,296 what is the value of the digit 2?

Th	H	T	O
8	2	9	6

Answer: 200

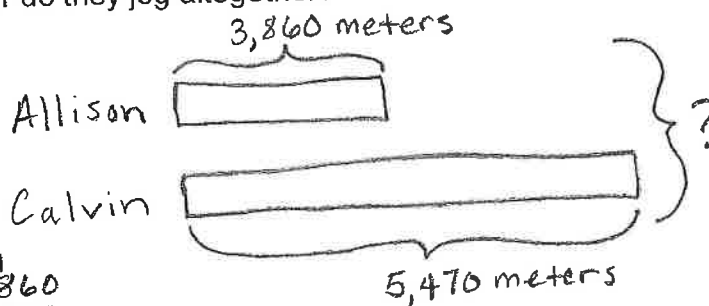
10. Subtract 989 from the sum of 1,857 and 2,465.

$\begin{array}{r} 1 \quad 1 \quad 1 \\ 1,857 \\ + 2,465 \\ \hline 4,322 \end{array}$	$\begin{array}{r} 3 \quad 12 \quad 11 \quad 12 \\ 34,822 \\ - 989 \\ \hline 3,333 \end{array}$
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Answer: 3,333

Solve. Show your work and use bar models to help.

11. Allison jogs 3,860 meters and Calvin jogs 5,470 meters.
How far do they jog altogether?



$$\begin{array}{r} 1 \quad 1 \\ 3,860 \\ + 5,470 \\ \hline 9,330 \end{array}$$

Allison and Calvin jog 9,330 meters altogether.

Solve. Show your work.

12. Marbles per bag:

Bag A:	Bag B:	Bag C:	Bag D:	Bag E:
1,138	2,786	1,412	4,354	5,588

Jane takes Bag B and Bag D.

Karen takes Bag E.

- a. Who has more marbles?
- Jane has more marbles.
- $$\begin{array}{r} 2,786 \\ + 4,354 \\ \hline 7,140 \end{array} = \text{Jane's marbles}$$
- $$5,588 = \text{Karen's marbles}$$

- b. How many more marbles does she have?

$$\begin{array}{r} 67,140 \\ - 5,588 \\ \hline 1,552 \end{array}$$

Jane has 1,552 more marbles.

Solve.

13. Add 2,659 to 784. The sum is _____ more than 555.

b. 2,878

b. 2,888

c. 2,988

d. 3,988

$$\begin{array}{r} 2,659 \\ + 784 \\ \hline 3,443 \end{array}$$
$$\begin{array}{r} 3,443 \\ - 555 \\ \hline 2,888 \end{array}$$

14.
$$\begin{array}{r} 2,573 \\ + 1,989 \\ \hline 4,562 \end{array}$$

15. When you regroup 23 ones, you get 2 tens and 3 ones.

Section 4:

Multiply mentally.

1. $4 \times 30 = \underline{120}$ ($4 \times 3 = 12$)

2. $9 \times 200 = \underline{1,800}$ ($9 \times 2 = 18$)

3. $8 \times 8 = \underline{64}$

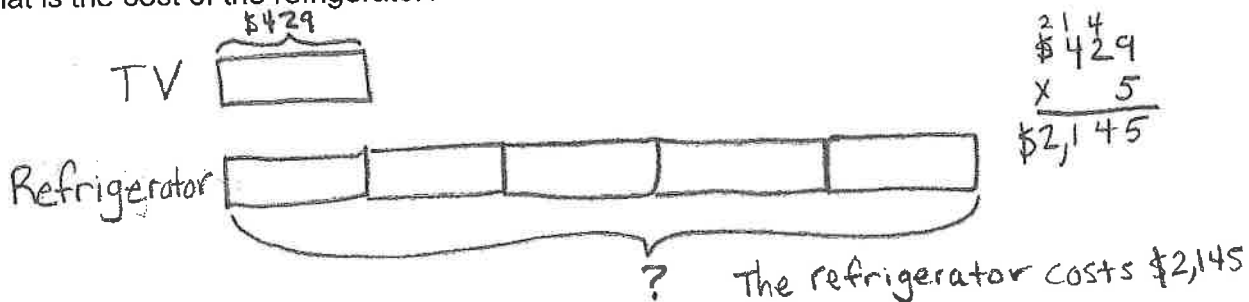
4. $5 \times 8 = \underline{40}$

5. $7 \times 70 = \underline{490}$ ($7 \times 7 = 49$)

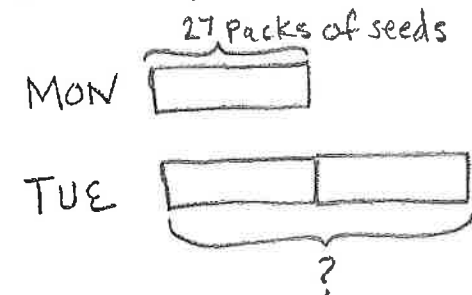
6. $9 \times 9 = \underline{81}$

Solve. Show your work and use bar models to help.

7. A refrigerator costs 5 times as much as a television. The television costs \$429. What is the cost of the refrigerator?



8. The students in class 3A buy 500 packets of seeds to start an eco-garden. On Monday, they use 27 packets of seeds. On Tuesday, they use twice as many packets as on Monday. How many packets of seeds do the students have left?



$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \end{array} \quad \begin{array}{r} 450 \\ - 81 \\ \hline 419 \end{array}$$

The students in 3A have 419 packets of seeds left.

9. A store records the sales of its toys in the table below.

MONTH	NUMBER OF TOYS SOLD
January	180
February	90 more than in January
March	3 times as many as in February
April	320 fewer than in March

a. How many toys are sold in February?

270

$$\begin{array}{r} 180 \\ + 90 \\ \hline 270 \end{array}$$

b. How many toys are sold in March?

810

$$\begin{array}{r} 270 \\ \times 3 \\ \hline 810 \end{array}$$

c. How many toys are sold in April?

490

$$\begin{array}{r} 810 \\ - 320 \\ \hline 490 \end{array}$$

d. How many toys are sold altogether during the four months?

1,750

$$\begin{array}{r} 180 \\ 270 \\ 810 \\ + 490 \\ \hline 1,750 \end{array}$$

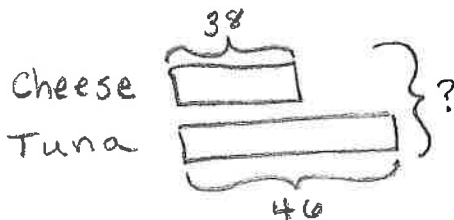
10.
$$\begin{array}{r} 11 \\ 358 \\ \times 2 \\ \hline 716 \end{array}$$

11.
$$\begin{array}{r} 31 \\ 152 \\ \times 6 \\ \hline 912 \end{array}$$

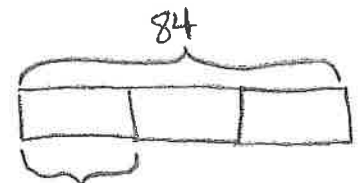
12.
$$\begin{array}{r} 14 \\ 126 \\ \times 7 \\ \hline 882 \end{array}$$

Solve. Show your work and use bar models to help.

13. Sophia prepares 38 cheese sandwiches and 46 tuna sandwiches. She puts the sandwiches equally onto 3 platters. How many sandwiches are on each platter?



next, Tuna & Cheese



$$\begin{array}{r} 1 \\ 38 \\ + 46 \\ \hline 84 \end{array}$$

$$\begin{array}{r} 28 \\ 3 \overline{)84} \\ - 60 \\ \hline 24 \\ - 24 \\ \hline 0 \end{array}$$

Sophia puts 28 sandwiches on each platter.

14. Maria has \$500. She buys a pair of shoes for \$108. She gives the rest of the money to her 4 nieces. Her nieces share the money equally.

a. How much money does Maria give to her 4 nieces?

Maria's Money $\overbrace{\hspace{10em}}^{\$500}$
 Shoes $\underbrace{\hspace{2em}}_{\$108}$ $\underbrace{\hspace{8em}}_?$

$$\begin{array}{r} 4 \overline{) 500} \\ - 108 \\ \hline 392 \end{array}$$

Maria gives her nieces \$392.

b. How much does each niece get?

Maria's Nieces $\overbrace{\hspace{10em}}^{\$392}$
 Each niece gets \$98.

$$\begin{array}{r} 98 \\ 4 \overline{) 392} \\ - 360 \\ \hline 32 \\ - 32 \\ \hline 0 \end{array}$$

15. In 5,786 the digit 5 has the same value as 5 x 1,000.

a. 5 x 1 b. 5 x 10 c. 5 x 100 **d. 5 x 1,000**

$$\begin{array}{r} 1,000 \\ \times 5 \\ \hline 5,000 \end{array}$$

16. What is the product of 346 and 9?

a. 300 + 14
b. 3,000 + 14
c. 300 + 100 + 4

d. 3,000 + 100 + 14

$$\begin{array}{r} 346 \\ \times 9 \\ \hline 3,114 \end{array} \rightarrow \text{in expanded form} = 3,000 + 100 + 14$$

17. Divide 87 by 6. The remainder is 3.

a. 2 **b. 3** c. 4 d. 5

$$\begin{array}{r} 14 R 3 \\ 6 \overline{) 87} \\ - 60 \\ \hline 27 \\ - 24 \\ \hline 3 \end{array}$$

18. Find the greatest product of a 3-digit number and a 1-digit number using each digit below only once. (3 5 6 7)

clue: order digits from greatest to least & multiply by greatest digit.

$$\begin{array}{r} 6 \quad 5 \quad 3 \\ \times 7 \\ \hline 4 \quad 5 \quad 7 \quad 1 \end{array}$$

Section 5:

Solve.

1. Sally and Joshua have the same amount of money.
 Joshua pays \$9.10 for a bag and has \$16.25 left.
 Sally buys a pen and has \$19.60 left.
 How much does the pen cost? ?

Joshua

BAG	\$ Left
\$9.10	\$16.25

$$\begin{array}{r} \$16.25 \\ + 9.10 \\ \hline \$25.35 \end{array}$$

$$\begin{array}{r} \$25.35 \\ - 19.60 \\ \hline \$5.75 \end{array}$$

Sally

\$ Left	Pen
\$19.60	? cost

The Pen Sally bought cost \$5.75.

2. Isaac buys a block of cheese for \$5.70, a bottle of olive oil for \$11.25, and a package of frozen chicken wings for \$18.99.
 Isaac gives the cashier three \$10 bills, two \$5 bills, and four \$1 bills. How much change will Isaac get in return?

$$\begin{array}{r} \$5.70 \\ + 11.25 \\ + 18.99 \\ \hline \$35.94 = \text{Isaac spent} \end{array}$$

Isaac paid with:

$$\begin{array}{r} \$30.00 (3 \times \$10) \\ + 10.00 (2 \times \$5) \\ + 4.00 (4 \times \$1) \\ \hline \$44.00 \end{array}$$

$$\begin{array}{r} \$44.00 \\ - 35.94 \\ \hline \$8.06 \end{array}$$

Isaac will get \$8.06 in change.

3. Mr. Lim buys a sweater, a handbag, and a watch.
 The sweater costs \$108.90.
 The handbag costs \$60.30 less than the sweater.
 The watch costs \$50.50 more than the sweater.
 Mr. Lim receives \$33.10 in change.
 How much did Mr. Lim pay the cashier?

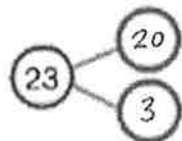
$$\begin{array}{r} \$316.90 (\text{total cost}) \\ + 33.10 (\text{change}) \\ \hline \$350.00 \end{array}$$

$$\begin{array}{r} \$108.90 (\text{sweater}) \\ - 60.30 \\ \hline \$48.60 (\text{handbag}) \\ + 108.90 \\ \hline \$159.40 \\ + 50.50 \\ \hline \$210.90 \end{array}$$

Mr. Lim paid the cashier \$350.00.

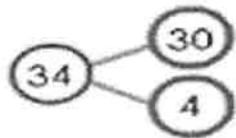
Add or subtract mentally. Use number bonds to help you.

4. Find $45 + 23$.



$$\begin{aligned} 45 + 20 &= 65 \\ 65 + 3 &= 68 \\ \text{So, } 45 + 23 &= 68 \end{aligned}$$

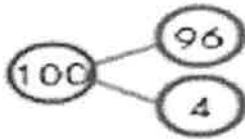
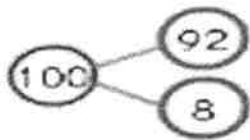
5. Find $87 - 34$.



$$\begin{array}{r} 87 \\ - 30 \\ \hline 57 \end{array} \quad \begin{array}{r} 57 \\ - 4 \\ \hline 53 \end{array}$$

So, $87 - 34 = 53$

6. Find $92 + 96$.



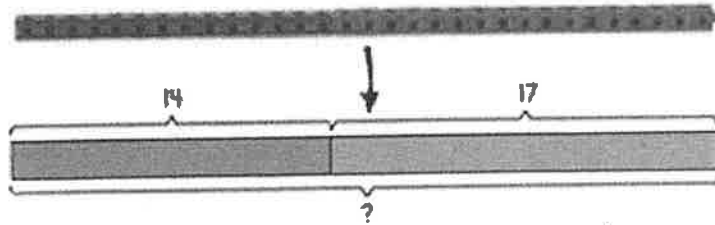
$$\begin{array}{r} 100 \\ + 100 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 1200 \\ - 12 \\ \hline 1188 \end{array}$$

So, $\begin{array}{r} 92 \\ + 96 \\ \hline 188 \end{array}$

Solve. Use bar models to help you.

7. Helen puts 14 bread sticks in a basket. Her friend puts 17 breadsticks in the basket. How many breadsticks are in the basket?

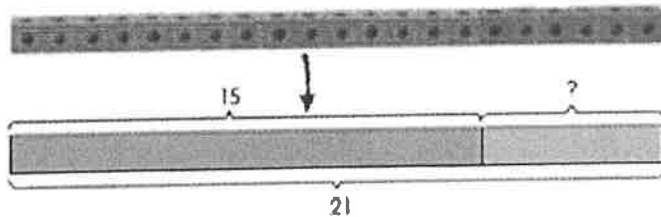


$$14 + 17 = 31$$

There are 31 breadsticks in the basket.

$$\begin{array}{r} 14 \\ + 17 \\ \hline 31 \end{array}$$

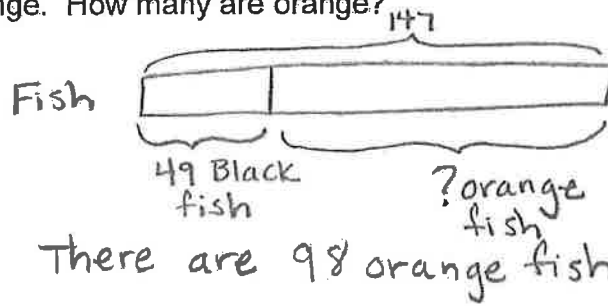
8. The third grade class has a new aquarium. There are 21 fish in it. 15 fish were given by families. The rest were bought by the school. How many were bought by the school?



$$\begin{array}{r} 21 \\ - 15 \\ \hline 6 \end{array}$$

The school bought 6 fish.

9. There are 147 fish in a pond. 49 of them are black.
The rest are orange. How many are orange?



$$\begin{array}{r} 13 \\ + 17 \\ - 49 \\ \hline 98 \end{array}$$

Solve:
10.

$$\begin{array}{r} 12 \\ 4 \overline{) 48} \\ \underline{40} \\ 8 \\ 8 \\ \hline 0 \end{array}$$

11.

$$\begin{array}{r} 32 \\ 2 \overline{) 64} \\ \underline{60} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

12.

$$\begin{array}{r} 14 \\ 4 \overline{) 56} \\ \underline{40} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

13. $86 \div 2 = 43$

14. $38 \div 2 = 19$

15. $75 \div 4 = 18 \text{ r } 3$

13.
$$\begin{array}{r} 43 \\ 2 \overline{)86} \\ \underline{-80} \\ 6 \\ \underline{-6} \\ 0 \end{array}$$

16.
$$\begin{array}{r} 19 \\ 2 \overline{)38} \\ \underline{-20} \\ 18 \\ \underline{-18} \\ 0 \end{array}$$

15.
$$\begin{array}{r} 18 \text{ r } 3 \\ 4 \overline{)75} \\ \underline{-40} \\ 35 \\ \underline{-32} \\ 3 \end{array}$$

Section 6:

Solve. Show your work.

1. Maria has 48 pencils. She gives the same number of pencils to each of her friends, and she has 3 pencils left. Each friend gets 9 pencils. How many friends are there?

There are 5 friends.

$$\begin{array}{r} 5 \text{ r } 3 \\ 9 \overline{)48} \\ \underline{-45} \\ 3 \end{array}$$

Round each number to the nearest hundred.

2. $\overset{\curvearrowright}{3}40 \rightarrow 300$

3. $\underline{8}82 \rightarrow 900$

4. $\underline{5}50 \rightarrow 600$

Round each number to the nearest ten.

5. $\overset{\curvearrowright}{2}2 \rightarrow 20$

6. $\underline{9}9 \rightarrow 100$

7. $\underline{1}50 \rightarrow 160$

Divide:

8. $72 \div 6 = \underline{12}$

9. $49 \div 7 = \underline{7}$

10. $64 \div 8 = \underline{8}$

8.
$$\begin{array}{r} 12 \\ 6 \overline{)72} \\ \underline{-60} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

9. $7 \times 7 = 49$
 $49 \div 7 = 7$

10. $8 \times 8 = 64$
 $64 \div 8 = 8$

Add or subtract using mental math.

11. $99 + 42 = \underline{141}$

12. $198 - 97 = \underline{101}$

13. $49 + 51 = \underline{100}$

11. $100 + 42 = 142$

$142 - 1 = 141$

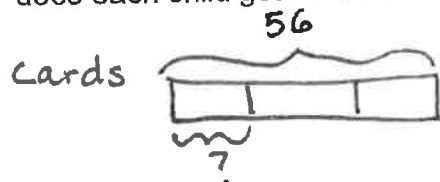
13. $50 + 51 = 101$
 $101 - 1 = 100$

12. $198 - 98 = 100$

$100 + 1 = 101$

Divide to solve.

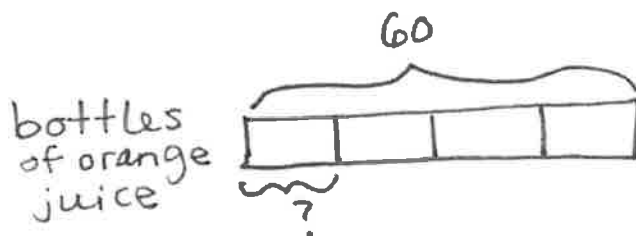
14. Three friends share 56 cards equally. How many cards does each child get? How many cards are left over?



$$\begin{array}{r} 18 R 2 \\ 3 \overline{)56} \\ \underline{-30} \\ 26 \\ \underline{-24} \\ 2 \end{array}$$

Each friend gets 18 cards. 2 cards are leftover.

15. Timothy packs 60 bottles of orange juice equally into four containers. How many bottles are in each container?



$$\begin{array}{r} 15 \\ 4 \overline{)60} \\ \underline{-40} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

There are 15 bottles of orange juice in each container.

Section 7:

Subtract:

$$\begin{array}{r} 1. \quad \$37.65 \\ - \$16.03 \\ \hline \$21.62 \end{array}$$

$$\begin{array}{r} 2. \quad 4 \\ \$85.00 \\ - \$21.60 \\ \hline \$63.40 \end{array}$$

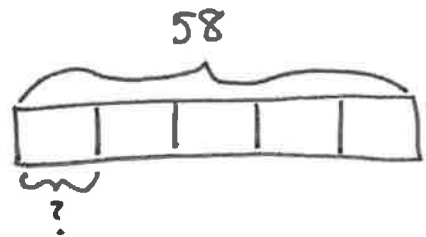
$$\begin{array}{r} 3. \quad 5 \\ \$36.78 \\ - \$14.95 \\ \hline \$21.83 \end{array}$$

$$\begin{array}{r} 4. \quad 69 \\ \$70.00 \\ - \$28.20 \\ \hline \$41.80 \end{array}$$

Divide to solve.

5. Paul has 58 bicycles in his shop.
He arranges them in 5 equal rows.
a. How many are in each row?
b. How many are left over?

bicycles



$$\begin{array}{r} 11 \text{ r } 3 \\ 5 \overline{) 58} \\ \underline{-50} \\ 8 \\ \underline{-5} \\ 3 \end{array}$$

There are 11 bicycles in each row.

There are 3 bicycles left over.

Estimate first, then solve.

6. A tennis club orders 715 tennis balls. After some matches, 318 are worn out. The remaining matches will use 415 balls. Does the club have enough balls for the remaining matches?

$$\begin{array}{r} 715 \rightarrow 700 \\ 318 \rightarrow 300 \\ \hline 400 \end{array} \quad \begin{array}{r} 415 \\ - 400 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 6 \text{ } 10 \\ 715 \\ - 318 \\ \hline 397 \end{array} \quad \begin{array}{r} 415 \\ - 397 \\ \hline 18 \end{array}$$

The club does not have enough balls for the remaining matches. They need 18 more.

7. The drama club has \$416 to spend on the next play.
Costumes cost \$185.00. Make up costs \$176.00.
What is the total cost of costumes and make up? How
much money is left over after buying the two items?

$$\begin{array}{r} \$185 \\ +\$176 \\ \hline \$361 \end{array}$$

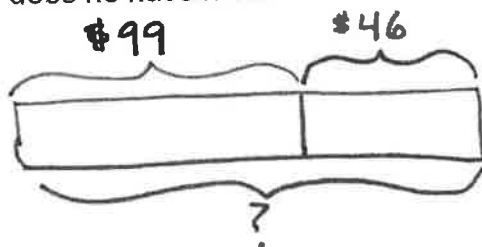
$$\begin{array}{r} \$416 \\ -\$361 \\ \hline \$55 \end{array}$$

The total cost of costumes and makeup is \$361.
\$55 is left over after buying the two items.

$$\begin{array}{r} \$185 \rightarrow \$200 \\ +\$176 \rightarrow +\$200 \\ \hline \$400 \\ \$416 \\ -\$400 \\ \hline \$16 \end{array}$$

8. Rick has \$99.00. He saves another \$46.00. How much money does he have now?

Rick's money



Rick has \$145 now.

$$\begin{array}{r} \$99 \rightarrow \$100 \\ +\$46 \rightarrow +\$50 \\ \hline \$145 \end{array}$$

Use multiplication to solve.

9. Mr. Brown has 9 mirrors.
Each mirror has 9 sides.
How many sides do the mirrors have in all?

$$9 \times 9 = 81$$

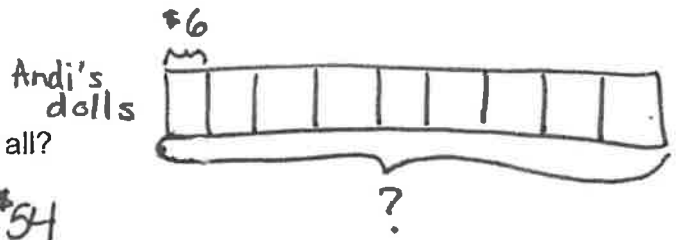
The nine mirrors have 81 sides in all.

10. Pencils are given to 4 children.
Each child has 6 pencils.
How many pencils do the children have in all?

$$4 \times 6 = 24$$

The children have 24 pencils in all.

11. Andi has nine dolls.
Each doll costs \$6
How much do the nine dolls cost in all?



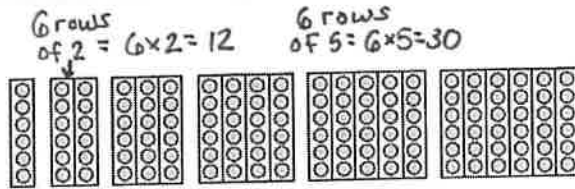
$$9 \times 6 = 54$$

Andi's nine dolls cost \$54 in all.

12. $4 \times \underline{5} = \underline{5} \times 4 = 20$

13. $10 \times \underline{9} = \underline{9} \times 10 = 90$

14. Look at each array model, then fill in the blanks.



a. $6 \times \underline{12} = 18 \quad 24 \times \underline{30} = 36$

b. $30 + 6 = 36$
 $36 + 6 = 42$
 $42 + 6 = 48$
 $48 + 6 = 54$
 $54 + 6 = 60$

Solve:

15. $18 = \underline{3} \times 6$

16. $36 = \underline{6} \times 6$

17. $54 = \underline{9} \times 6$

Section 8:

Divide mentally. Use related multiplication facts and patterns to help you.

1. Find $350 \div 5$

$$\begin{aligned} 350 \div 5 &= \underline{35} \text{ tens} \div 5 \\ &= \underline{7} \text{ tens} \\ &= \underline{70} \end{aligned}$$

2. $700 \div 7 = \underline{100}$ $70 \div 7 = 10$

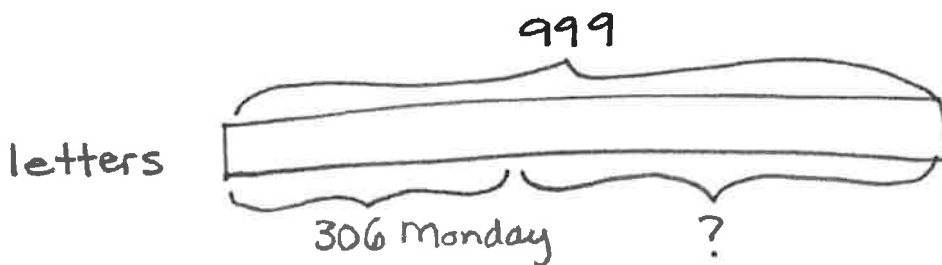
3. $560 \div 8 = \underline{70}$ $56 \div 8 = 7$

4. $6400 \div 8 = \underline{800}$ $64 \div 8 = 8$ $640 \div 8 = 80$

5. $7200 \div 9 = \underline{800}$ $72 \div 9 = 8$ $720 \div 9 = 80$

Solve. Draw bar models to help you.

6. A letter carrier delivers 999 letters in two days. The carrier delivers 306 letters on Monday and the rest of the letters on Tuesday. How many letters does the carrier deliver on Tuesday?



$$\begin{array}{r} 999 \\ - 306 \\ \hline 693 \end{array}$$

The carrier delivers 693 letters on Tuesday.

Multiply.

$$7. 8 \times 2 = \underline{16}$$

$$8. 9 \times 6 = \underline{54}$$

$$9. 6 \times 8 = \underline{48}$$

$$10. 7 \times 5 = \underline{35}$$

$$11. 9 \times 4 = \underline{36}$$

$$12. 7 \times 3 = \underline{21}$$

Divide.

$$13. 108 \text{ divided by } 12 = \underline{9}$$

$$14. 121 \text{ divided by } 11 = \underline{11}$$

$$15. 75 \text{ divided by } 5 = \underline{15}$$

13)

$$108 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 12$$

$$9 \times 12 = 108$$

$$108 \div 12 = 9$$

14)

$$\begin{array}{r} 11 \\ 11 \overline{) 121} \\ \underline{-110} \\ 11 \\ \underline{-11} \\ 0 \end{array}$$

15)

$$\begin{array}{r} 15 \\ 5 \overline{) 75} \\ \underline{-50} \\ 25 \\ \underline{-25} \\ 0 \end{array}$$

Section 9:

Fill in the blanks.

1. 5,600 is 1,020 more than 4,580.

2. 7,203 is 100 more than 7,103.

3. The difference between 654 and 1,000 is 346.

4. $3,000 + \underline{400} + 25 = 3,425$.

5. The sum of 4,681 and 500 is 5,181.

6. 5,642 in expanded form is:

$5,000 + 600 + 40 + 2$

7. In 1,863, the digit 60 is in the tens place, and its value is 60.

8. When 349 is divided by 5, the quotient is 69 and the remainder is 4.

9. Complete the number pattern. 5,576, 5,676, 5,776, 5,876, 5,976, 6,076.

10. Which of the following is the best estimate for the value of 386×8 ?

- 863 6,300 3,500 3,200

$386 \rightarrow 400$
 $\begin{array}{r} 400 \\ \times 8 \\ \hline 3,200 \end{array}$

11. $\star + \star + \star = 27$

$9 + 9 + 9 = 27$

$\star = 9$

$9 \times 8 = 72$

$\textcircled{C} + \textcircled{C} + \textcircled{C} + \textcircled{C} = 32$

$8 + 8 + 8 + 8 = 32$

$\textcircled{C} = 8$

Find the value of:

$\star \times \textcircled{C} = \underline{72}$

12. Solve these problems.

$\begin{array}{r} 2 \\ 149 \\ \times 3 \\ \hline \end{array}$

447

$\begin{array}{r} 2 \\ 450 \\ \times 5 \\ \hline \end{array}$

2,250

$\begin{array}{r} 1 \\ 402 \\ \times 8 \\ \hline \end{array}$

3,216

1) $\begin{array}{r} 5,600 \\ - 4,580 \\ \hline 1,020 \end{array}$

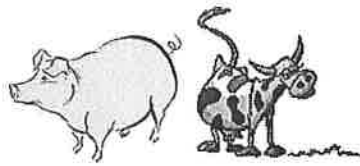
2) $\begin{array}{r} 7,203 \\ - 100 \\ \hline 7,103 \end{array}$

3) $\begin{array}{r} 1,000 \\ - 654 \\ \hline 346 \end{array}$

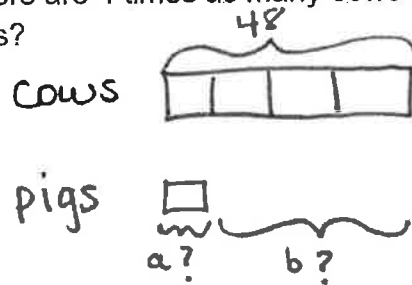
5) $\begin{array}{r} 4,681 \\ + 500 \\ \hline 5,181 \end{array}$

$\begin{array}{r} 69 \\ 5 \overline{)349} \\ - 300 \\ \hline 49 \\ - 45 \\ \hline 4 \end{array}$

13. There are 48 cows on the farm. There are 4 times as many cows as pigs. How many more cows are there than pigs?



$$\begin{array}{r} 48 \\ - 12 \\ \hline 36 \end{array}$$

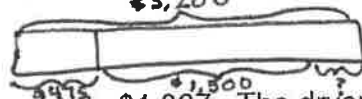


4 units = 48
1 unit = 12

$$\begin{array}{r} a. 12 \\ 4 \overline{)48} \\ \underline{-40} \\ 8 \\ \underline{-8} \\ 0 \end{array}$$

There are 36 more cows than pigs.

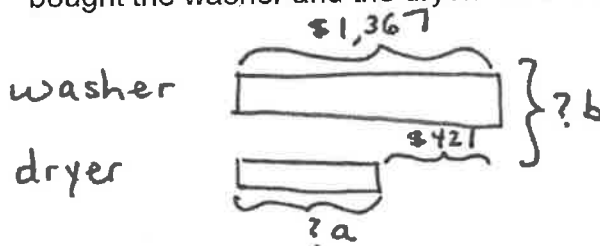
14. Mr. Ling earns \$3,200 a month. He spends \$475 on food, \$1,500 on other things, and saves the rest. How much does he save in a month?



Mr. Ling saves \$1,225 in a month.

$$\begin{array}{r} 2119 \\ \$3,200 \\ + \$475 \\ \hline \$1,975 \\ \$3,200 \\ - \$1,975 \\ \hline \$1,225 \end{array}$$

15. The washer costs \$1,367. The dryer is \$421 less than the washer. Louise bought the washer and the dryer. How much did she pay?



$$\begin{array}{r} \$1,367 \\ - \$421 \\ \hline \$946 \\ \$1,367 \\ + \$946 \\ \hline \$2,313 \end{array}$$

Louise paid \$2,313.

16.

Round 5,230 to the nearest 1,000. 5,000

Round 7,986 to the nearest 100. 8,000

Round 6,675 to the nearest 10. 6,680

Section 10:

Solve.

1. $\$3.20$
 $+\$4.75$
 $\$7.95$

2. $\$4.65$
 $+\$5.33$
 $\$9.98$

3. $\$8.65$
 $-\$4.00$
 $\$4.65$

3. $\$8.65 - \$4.00 = \underline{\$4.65}$

4. $\$9.70 - \$0.60 = \underline{\$9.10}$

4. $\$9.70$
 $-\$0.60$
 $\$9.10$

5. Place the following digits in the boxes so that the sum of the 3-digit numbers is 999. Use each digit only once.

1 2 3 4 5 6 7 8 9

1	8	9
2	6	7
5	4	3
<div style="display: flex; justify-content: space-around; width: 100%;"> 9 9 9 </div>		

6. What is the missing number?

47 → subtract 18 → multiply 3 = 87

³ 47	² 29
$-\underline{18}$	$\times 3$
29	$\underline{87}$

7. Complete the following number pattern.

1, 2, 3, 5, 8, 13, 21, 34, 55

$1+2=3$ $3+5=8$ $8+13=21$ $21+34=55$
 $2+3=5$ $5+8=13$ $13+21=34$

8. Circle the number that has the digit 7 in the thousands place value.

a. 6,970
 tens

b. 7,906

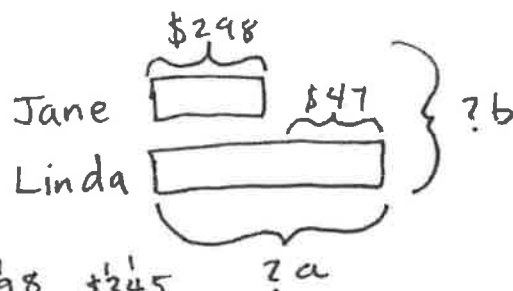
c. 9,607
 ones

d. 9,760
 hundreds

9. Jane has \$298. Linda has \$47 more than Jane.

How much do they have in all?

- a. \$251 b. \$345 c. \$549 d. \$643



$$\begin{array}{r} \overset{1}{\$}298 \\ + \quad 47 \\ \hline \overset{1}{\$}345 \end{array} \quad \begin{array}{r} \overset{1}{\$}345 \\ + 298 \\ \hline \overset{1}{\$}643 \end{array}$$

10. 30 tens is _____ more than 49 fives.

- a. 19 b. 55 c. 75 d. 251

$30 \text{ tens} = 300$

$$\begin{array}{r} 24 \\ 49 \\ \times 5 \\ \hline 245 \end{array} \quad \begin{array}{r} 910 \\ 2300 \\ -245 \\ \hline 65 \end{array}$$

11. Ian buys some magazines for \$8 each. He gives the cashier \$100 and receives \$4 change. How many magazines does Ian buy?

- a. 8 b. 9 c. 11 d. 12

$$\begin{array}{r} 100 \\ - \quad 4 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 12 \\ 8 \overline{)96} \\ -80 \\ \hline 16 \\ -16 \\ \hline 0 \end{array}$$

12. I divide a number by 3 and subtract 85 from the quotient to make 190.

What is the number?

- a. 35 b. 92 c. 315 d. 825

$$\begin{array}{r} 190 \\ + 85 \\ \hline 275 \end{array}$$

$$\begin{array}{r} 275 \\ 3 \overline{)825} \\ -600 \\ \hline 225 \\ -210 \\ \hline 15 \\ -15 \\ \hline 0 \end{array}$$

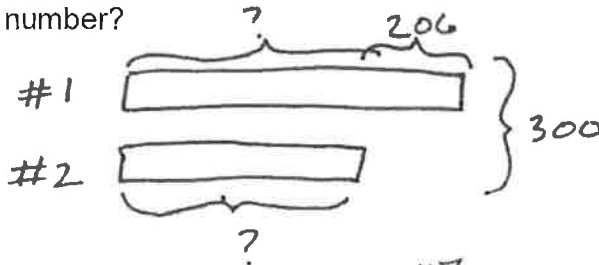
13. Multiply 124 and 8.

answer: 992

$$\begin{array}{r} 13 \\ 124 \\ \times 8 \\ \hline 992 \end{array}$$

14. The sum of two numbers is 300. One number is 206 more than the other.

answer: 47



$$\begin{array}{r} 300 \\ - 206 \\ \hline 94 \end{array}$$

$$\begin{array}{r} 47 \\ 2 \overline{)94} \\ -80 \\ \hline 14 \\ -14 \\ \hline 0 \end{array}$$