*Worksheet 1, Remainders after Dividing by Nine*

Name: Yesenia Velazquez

Date: 8-17-20

1. Kaitlyn is selling tickets for a sporting event. Nine people can sit in a row in the bleachers. A group of 12 people are attending. How many full rows of nine do they need? How many people will be sitting in the row that is not full, the partial row? Write your answers in the left chart below.

2. Next Kaitlyn sells tickets to a group of 22 people. How many full rows of nine will they need? How many will sit in the partial row? Write your answers in the left chart.

3. Kaitlyn then sells tickets to a group of 28 people. How many full rows will they need? How many will sit in the partial row? Write your answers in the left chart.

4. At halftime the three groups left, returned, and sat together. What is the fewest number of rows they need now? Write your answers in the left chart.

| Kaitlyn's Ticket Sales | | |
|---|---|---|
| Number of People | Full Rows with 9 People | People in Partial Row |
| 12 | 1 | 3 |
| 22 | 2 | 4 |
| 28 | 3 | 1 |
| 42 | 4 | 8 |

| Kurt's Ticket Sales | | |
|---|---|---|
| Number of People | Full Rows with 9 People | People in Partial Row |
| 15 | 1 | 6 |
| 23 | 2 | 5 |
| 30 | 3 | 3 |
| 68 | 7 | 5 |

5. Kurt is also selling tickets. His first group has 15 people, the second group has 23 people, and the third group has 30 people. Find the number of full rows and the number of people sitting in partial rows per group. Write your answers in the right chart above.

6. At halftime the three groups left, returned, and sat together. What is the fewest number of rows Kurt's groups need now? Write your answers in the right chart above.

7. What do you notice in Kaitlyn's chart about the number of people sitting in the partial rows before and after the groups are combined? 2 where even and 2 where odd

8. What do you notice in Kurt's chart about the number of people sitting in the partial rows before and after the groups are combined? We had to re group kurts I mean he did a bad job

Name: Yesenia Velazquez

Date: 8-19-20

Nothing
Right
Wrong

Add these numbers. Use check numbers to check your work.

(7) (0) (7) ✓
$7 + 9 =$ 14
7 0 7

(0) (3) (3) ✓
$18 + 30 =$ 48
0 3 3
3

(5) (4) (2) ✓
$77 + 6 =$ 83
5 4 2
2

(5) (3) (8) ✓
$41 + 21 =$ 42
5 3 8
8

(1) (8) (0) ✓
$19 + 35 =$ 45
1 8 0
0

(7) (2) (8) ✗
$25 + 29 =$ 45
7 2 8
0

(1) (1) (2) ✓
$73 + 37 =$ 110
1 2
2

(2) (4) (8) ✓
$56 + 24 =$ 71
2 4 8
8

(7) (4) (2) ✓
$43 + 40 =$ 83
7 4 2
2

(4) (2) (8) ✓
$78 + 20 =$ 98
4 2 8
8

(3) (8) (2)
$75 + 26 =$ 911
3 8 2
2

(5) (4) (2)
$68 + 24 =$ 812
5 4 2
2

(3) (4) (0) ✓
$147 + 33 =$ 180
3 4 0
0

(8) (8) (7) ✓
$188 + 26 =$ 214
8 8 7
7

(2) (5) (7) ✓
$209 + 428 =$ 637
2 5 7
7

(3) (7) (1) ✓
$39 +$ 61 $= 100$
3 7 1
1

(4) (8) (5) ✓
$87 +$ 17 $= 104$
4 8 5
5

(1) (1) (2) ✓
$127 +$ 73 $= 200$
1 1 2
2

Name: _Yrsenia Velazquez_

Date: _____

**Warm-Up**

Add these numbers. Use check numbers to check your work.

( 5 )  ( 5 )  ( 1 )
14 + 23 = _37_
  5      5       1

( 2 )  ( 5 )  ( 7 )
29 + 41 = _70_
  2      5       7

( 7 )  ( 3 )  ( 0 )
78 + 21 = _99_
  7      3       0

Add the number on the abacus plus 2576.



```
    4  3  8  2
 +  2  5  7  6
    4  9  5  8
```

Add the number on the abacus plus 4078.



```
 4  0  7  8  0
 5  4  6  6  0
 9  5  4  4  0
```

Add the number on the abacus plus 1909.



```
 1  9  0  9  0
 7  8  6  2  0
 9  7  7  1  0
```

Add the number on the abacus plus 4795.



```
 4  7  9  5
 3  4  0  4
 8  7  0  4
```

```
  4382
+ 2576
  4958
```

```
  4567
+ 7859
 12426
```

```
  5997
+ 3997
  9994
```

8-26-20

A million is a cube and a number it more then a thousand but less the billion. A million is 100 rows of cubes and 1000,1000 centimeter cubes that's a million.

Name: _____

Date: _____

## Warm-Up

Add these numbers. Use check numbers to check your work.

$$
\begin{array}{r}
4382 \ (8) \\
+ \ 5948 \ (8) \\
\hline
10330
\end{array}
\qquad
\begin{array}{r}
2374 \ (7) \\
+ \ 5958 \ (8) \\
\hline
8332
\end{array}
\qquad
\begin{array}{r}
2988 \ (9) \\
+ \ 5247 \ (0) \\
\hline
8235 \quad 9
\end{array}
$$

**INFORMATION: When writing numbers with digits, put a comma between number periods.**

Underline the period words in the following numbers. Then compose the number with place-value cards and write it in the rectangles. Write the number on the line using commas.

five <u>billion</u> four hundred thirty-one million seven hundred two thousand eight hundred sixty-nine

☐ ☐☐☐ ☐☐☐ ☐☐☐   5,431,702,869

thirty-two billion nine hundred seventeen million five hundred eighty-four thousand six hundred

☐☐ ☐☐☐ ☐☐☐ ☐☐☐   32,917,584,600

sixty billion two hundred ninety-eight million eight hundred thousand one hundred thirty-four

☐☐ ☐☐☐ ☐☐☐ ☐☐☐   60,298,800,134

eleven billion twenty-nine million eight hundred fifty-five thousand seventy-three

☐☐ ☐☐☐ ☐☐☐ ☐☐☐   11,029,855,073

Write these number in words:

305,162,000   Three hundred and five
million one hundred and sixty-two thousand

_____

200,064,014   Two hundred million sixty-four thousand
and fourteen

_____

Name: _____

Date: _____

## Warm-Up

Fill in the tables.

| | Quotient (answer) | Remainder |
|---|---|---|
| 49 ÷ 7 | 7 | 0 |
| 50 ÷ 7 | 7 | 1 |
| 51 ÷ 7 | 7 | 2 |
| 52 ÷ 7 | 7 | 3 |

| | Quotient (answer) | Remainder |
|---|---|---|
| 27 ÷ 6 | 4 | 3 |
| 28 ÷ 6 | 4 | 4 |
| 29 ÷ 6 | 4 | 5 |
| 30 ÷ 6 | 5 | 0 |

Round the following to the hundreds place and put the number into the correct columns.

| 12,323 | 12,470 | 12,424 | 12,567 | 12,400 |
|---|---|---|---|---|
| 12,491 | 12,399 | 12,603 | 12,599 | 12,250 |
| 12,290 | 12,461 | 12,546 | 12,287 | 12,356 |

| 12,300 | 12,400 | 12,500 | 12,600 |
|---|---|---|---|
| 12,323 | 12,400 | 12,461 | 12,599 |
| 12,290 | 12,399 | 12,491 | 12,567 |
| 12,287 | 12,424 | 12,470 | 12,603 |
| 12,250 | 12,356 | 12,546 | |

The earth's population on October 23, 2015 was estimated to be 7,375,870,314.

What is the earth's population to the nearest million? __7,376,000,000__

What is the earth's population to the nearest billion? __8,000,000,000__

Round the populations to the nearest million.

| | | |
|---|---|---|
| Australia | 23,630,169 | __24__ million |
| Canada | 35,524,732 | __36__ million |
| China | 1,404,643,511 | __1,405__ million |
| Ethiopia | 99,756,649 | __100__ million |
| United Kingdom | 64,596,800 | __65__ million |
| United States | 325,937,137 | __326__ million |
| World | 7,375,870,314 | __7,376__ million |

Write the countries in order from least population to greatest.

| |
|---|
| 7,380,000,000 |
| 330,000,000 |
| 100,000,000 |
| 65,000,000 |
| 36,000,000 |
| 24,000,000 |

1,405,000

Switch all the least with the greatest

| | | |
|---|---|---|
| 16,038 | 16,000 | 67,000 |
| 50,738 | 51,000 ↑ | |
| 90,329 | 90,000 | 90,000 |
| | | 157,000 |
| | | + 37,000 |
| 36,705 | 37,000 | 194,000 |
| | | 195,000 |
| 95,491 | 95,000 | 289,000 |
| | | + 22,000 |
| 22,250 | 22,000 | 22,000 |
| | | 311,000 |
| 47,347 | 47,000 | + 47,000 |
| | | 358,000 |
| 61,524 | 62,000 | + 62,000 |
| | | 420,000 |
| 86,371 | 86,000 | + 86,000 |
| | | 506,000 ∪ // |

**506.797**

Name: __Yesenia Velazquez__

Date: _____

1
69
22
_____
101

Write only the answers.

__700__

__91__

__300__

Write the answers.

318 + 87 = __405__

43 + __215__ = 200

(6 × 3) + (6 × 4) = __42__

18    24

*[handwritten in red: 8 9 10 / - 4 3 / 157]*

Add. Use check numbers.

4928 ( )
+ 2566 ( )

Write these numbers using digits and commas.

39 million 24 thousand 718 __39,024,718__

1 billion 319 thousand 679 __1,000,319,679__

623 million 381 __623,000,381__

*[handwritten in red: 1) 6,083,060  2) 6,000,000]*

Fill in the table.

|  | Round to nearest hundred. | Round to nearest thousand. | Round to nearest million. |
|---|---|---|---|
| 6,083,140 | 6,083,130 | 6,090,000 | 7,000,000 |
| 18,945,562 | 18,945,562 | 18,945,562 | 19,000,000 |
| 65,709,697 | 65,709,700 | 65,710,000 | 66,000,000 |
| 2,376,450,712 | 2,376,450,712 | 2,376,460,000 | 2,380,000,000 |

Write >, <, or = on the lines.

6 million __=__ 3,000,000 × 2

10,000 × 10 __=__ 1,000,000

29 × 1000 __=__ 29,000

3 hundred 6 __<__ 3006

360    40 × 9 __=__ 6 × 60    360

30 × 20 __>__ 30 + 2

Fill in the table.

|  | Quotient (answer) | Remainder |
|---|---|---|
| 42 ÷ 2 | 21 | 0 |
| 24 ÷ 7 | 3 | 3 |
| 73 ÷ 9 | 8 | 1 |
| 60 ÷ 9 | 6 | 6 |
| 24 ÷ 10 | 2 | 4 |
| 102 ÷ 10 | 10 | 2 |

Name: __Yesenia__

Date: _____

Write only the answers.

_____

_____

_____

Write the answers.

453 + 87 = __540__

64 + __136__ = 200

(7 × 5) + (7 × 2)= __49__
 35        14

Add. Use check
numbers.
11
3786 (24)  44
+ 5492 (20)
9278   26

Write these numbers using digits and commas.

73 million 853 thousand 37 __73,853,037__

18 million 46 thousand 679 __18,046,679__

2 billion 840 million 7 thousand 832 __2,840,007,832__

Fill in the table.

| | Round to nearest hundred. | Round to nearest thousand. | Round to nearest million. |
|---|---|---|---|
| 5,935,899 | 5,935,900 | 5,936,000 | 6,000,000 |
| 56,057,619 | 56,057,500 | 56,058,000 | 56,000,000 |
| 89,767,846 | 89,767,800 | 89,768,000 | ~~90,000,000~~ |
| 3,587,123,777 | 3,587,123,800 | 3,587,123,000 | 3,587,000,000 |

4

Write >, <, or = on the lines.

6 million __=__ 2,000,000 × 3

100,000 __<__ 10,000 × 100    1,000,000

74 × 1000 __=__ 74,000

5009 __>__ 5 hundred 9    509

30 × 8 __=__ 6 × 40

500 + 20 __<__ 500 × 2

Fill in the table.

| | Quotient (answer) | Remainder |
|---|---|---|
| 28 ÷ 2 | 14 | 0 |
| 37 ÷ 5 | 7 | 3 |
| 73 ÷ 10 | 7 | 3 |
| 98 ÷ 10 | 9 | 8 |
| 80 ÷ 9 | 8 | 8 |
| 70 ÷ 9 | 7 | 7 |

Name: __Yesenia Velazquez__

Date: _____

---

**Add using shortcuts.**

27 + 69 = __96__

354 + 78 = __432__

898 + 326 = __1,224__

**Add starting from the left.**

| 191 | 10,298 | 6537 |
|---|---|---|
| + 323 | + 4,375 | + 5948 |
| 514 | 14,673 | 12,485 |

---

**Subtract using shortcuts.**

67 − 18 = __49__

46 − 37 = __9__

234 − 135 = __99__

**Subtract using shortcuts.**

| 787 | 238 | 845 |
|---|---|---|
| − 768 | − 209 | − 547 |
| 19 | 29 | 298 |

---

Write a 3-digit number with consecutive digits. Then reverse the digits. For example, the first number could be 678, then the second number would be 876. Subtract the smaller number from the larger number. Do this at least three times and note the pattern.

987   321   654
789   123   456
198   198   198

Does this work for 4-digit numbers? For 5-digit numbers?

### I don't Remember anything i

Write any 3-digit number. Then reverse the digits. Find the difference. Then reverse the digits of the difference and add it to original difference. For example, if the first number is 149:

941 − 149 = 792; 792 + 297 = _____

Try this with these numbers, 412, 863, and 356. Note the pattern.

412-149= __263__ ; __263__ +356= __619__

Name: __Yesenia Velazquez__

Date: _____

### Warm-Up

Add using shortcuts.

$72 + 19 =$ __91__

$453 + 48 =$ __501__

$129 + 33 =$ __162__

Subtract using shortcuts.

$72 - 19 =$ __53__

$453 - 48 =$ __405__

$129 - 33 =$ __96__

Use side 2 of your abacus to find the differences.

1.
$$\begin{array}{r} 8445 \\ -5372 \\ \hline 3073 \end{array}$$

2.
$$\begin{array}{r} 3189 \\ -1734 \\ \hline 1455 \end{array}$$

3.
$$\begin{array}{r} 7240 \\ -5808 \\ \hline 1432 \end{array}$$

4.
$$\begin{array}{r} 2159 \\ -451 \\ \hline 1708 \end{array}$$

5.
$$\begin{array}{r} 2573 \\ -1094 \\ \hline 1479 \end{array}$$

6.
$$\begin{array}{r} 9062 \\ -5146 \\ \hline 3914 \end{array}$$

7.
$$\begin{array}{r} 3079 \\ -1836 \\ \hline 1243 \end{array}$$

8.
$$\begin{array}{r} 8625 \\ -6632 \\ \hline 1993 \end{array}$$

9.
$$\begin{array}{r} 9162 \\ -4585 \\ \hline 4577 \end{array}$$

10.
$$\begin{array}{r} 9468 \\ -8273 \\ \hline 1195 \end{array}$$

11.
$$\begin{array}{r} 4883 \\ -1709 \\ \hline 3175 \end{array}$$

12.
$$\begin{array}{r} 2728 \\ -1859 \\ \hline 849 \end{array}$$

*Worksheet 9, Checking Subtraction by Adding Up*

Name: _____

Date: _____

**Warm-Up**

Subtract.

$$
\begin{array}{r} 143 \\ -29 \\ \hline \end{array}
\qquad
\begin{array}{r} 587 \\ -392 \\ \hline \end{array}
\qquad
\begin{array}{r} 847 \\ -598 \\ \hline \end{array}
$$

Use adding up and check numbers to find the errors. Then correct the errors in the space below.

1.
$$
\begin{array}{r} 8449\ (7) \\ -\ 4177\ \underline{(1)} \\ 4372\ (7) \end{array}
$$

2.
$$
\begin{array}{r} 9427\ (4) \\ -\ 7921\ \underline{(1)} \\ 1596\ (3) \end{array}
$$

3.
$$
\begin{array}{r} 6966\ (0) \\ -\ 4138\ \underline{(7)} \\ 2838\ (2) \end{array}
$$

4.
$$
\begin{array}{r} 3443\ (5) \\ -\ 1088\ \underline{(8)} \\ 2355\ (7) \end{array}
$$

5.
$$
\begin{array}{r} 8194\ (4) \\ -\ 5532\ \underline{(6)} \\ 2552\ (2) \end{array}
$$

6.
$$
\begin{array}{r} 4912\ (7) \\ -\ 3134\ \underline{(2)} \\ 1778\ (5) \end{array}
$$

7.
$$
\begin{array}{r} 5129\ (8) \\ -\ 3186\ \underline{(0)} \\ 2043\ (0) \end{array}
$$

8.
$$
\begin{array}{r} 9095\ (5) \\ -\ 4697\ \underline{(8)} \\ 4498\ (7) \end{array}
$$

9.
$$
\begin{array}{r} 5660\ (8) \\ -\ 3496\ \underline{(4)} \\ 2164\ (4) \end{array}
$$

Subtract and check your work.

10.
$$
\begin{array}{r} 7797\ (\ \ ) \\ -\ 843\ \underline{(\ \ )} \end{array}
$$

11.
$$
\begin{array}{r} 6595\ (\ \ ) \\ -\ 5456\ \underline{(\ \ )} \end{array}
$$

12.
$$
\begin{array}{r} 6042\ (\ \ ) \\ -\ 3537\ \underline{(\ \ )} \end{array}
$$

13.
$$
\begin{array}{r} 2275\ (\ \ ) \\ -\ 757\ \underline{(\ \ )} \end{array}
$$

14.
$$
\begin{array}{r} 7890\ (\ \ ) \\ -\ 4362\ \underline{(\ \ )} \end{array}
$$

15.
$$
\begin{array}{r} 4175\ (\ \ ) \\ -\ 1802\ \underline{(\ \ )} \end{array}
$$

Name: _____

Date: _____

**Warm-Up**

Subtract these numbers.

$$543\ (\ ) \\ -\ 435\ (\ \ ) \\ \overline{\ 108\ }$$

$$752\ (\ ) \\ -\ 527\ (\ \ ) \\ \overline{\ 225\ }$$

$$947\ (\ ) \\ -\ 479\ (\ \ ) \\ \overline{\ 468\ }$$

**INFORMATION**: **A magic square is a special array of numbers. In a magic square, the sum of each row, column, and diagonal is the same. This sum is the *magic sum.***

Complete the magic squares below. Write the magic sums below them.

| 2 | 9 | 4 |
|---|---|---|
| 7 | 5 | 3 |
| 6 | 1 | 8 |

__15__

| 8 | 1 | 6 |
|---|---|---|
| 3 | 5 | 7 |
| 4 | 9 | 2 |

__15__

| 16 | 3 | 2 | 13 |
|----|---|---|----|
| 5 | 10 | 11 | 8 |
| 9 | 6 | 7 | 2 |
| 4 | 15 | 14 | 1 |

__34__

| 9 | 6 | 3 | 16 |
|---|---|---|----|
| 4 | 15 | 10 | 5 |
| 14 | 1 | 8 | 11 |
| 7 | 12 | 13 | 2 |

__34__

Complete the magic squares.

**Rotations** 15

**A**

| 2 | 9 | 4 |
|---|---|---|
| 7 | 5 | 3 |
| 6 | 1 | 8 |

**B**

| 6 | 7 | 2 |
|---|---|---|
| 1 | 5 | 9 |
| 8 | 3 | 4 |

**C**

| 8 | 1 | 6 |
|---|---|---|
| 3 | 5 | 7 |
| 4 | 9 | 2 |

**D**

| 4 | 3 | 8 |
|---|---|---|
| 9 | 5 | 1 |
| 2 | 7 | 6 |

**E**

| 6 | 1 | 8 |
|---|---|---|
| 7 | 5 | 3 |
| 2 | 9 | 4 |

**F**

| 4 | 9 | 2 |
|---|---|---|
| 3 | 5 | 7 |
| 8 | 1 | 6 |

**G**

| 2 | 7 | 6 |
|---|---|---|
| 9 | 5 | 1 |
| 4 | 3 | 8 |

**H**

| 8 | 3 | 4 |
|---|---|---|
| 1 | 5 | 9 |
| 6 | 7 | 2 |

**Reflections**

Name: <u>Yesenia Velazquez</u>

Date: _____

**Warm-Up**

Subtract these numbers.

$$\begin{array}{r} \overset{6\ 12}{8\cancel{7}2}\ (\ \ ) \\ -\ 728\ (\ \ ) \\ \hline 144 \end{array}$$

$$\begin{array}{r} \overset{12}{6}\overset{}{\cancel{7}}\overset{14}{3\cancel{4}}\ (\ \ ) \\ -\ 347\ (\ \ ) \\ \hline 387 \end{array}$$

$$\begin{array}{r} \overset{3\ 12}{4\cancel{2}9}\ (\ \ ) \\ -\ 294\ (\ \ ) \\ \hline 135 \end{array}$$

---

**1.** Add 7 to each cell in the magic square to make a new array.
Is the new array a magic square? _____

| 2 | 9 | 4 |
|---|---|---|
| 7 | 5 | 3 |
| 6 | 1 | 8 |

+ 7

| 9 | 16 | 11 |
|---|---|---|
| 14 | 12 | 10 |
| 13 | 8 | 15 |

**2.** Subtract 3 to each cell in the magic square to make a new array. Is the new array a magic square? _____

| 6 | 1 | 8 |
|---|---|---|
| 7 | 5 | 3 |
| 2 | 9 | 4 |

− 3

| 3 | -2 | 5 |
|---|---|---|
| 4 | 2 | 0 |
| -1 | 6 | 1 |

**3.** Multiply each cell in the magic square by 11 to make a new array.
Is the new array a magic square? yes

| 4 | 9 | 2 |
|---|---|---|
| 3 | 5 | 7 |
| 8 | 1 | 6 |

× 11

| 44 | 99 | 22 |
|---|---|---|
| 33 | 55 | 77 |
| 88 | 11 | 66 |

___ magic sum: ___

**4.** Add corresponding numbers in the two magic squares. Is the new array a magic square? yes

| −1 | 3 | −2 |
|---|---|---|
| −1 | 0 | 1 |
| 2 | −3 | 1 |

+

| 2 | 1 | 6 |
|---|---|---|
| 7 | 3 | −1 |
| 0 | 5 | 4 |

=

| 1 | 4 | 4 |
|---|---|---|
| 6 | 3 | 0 |
| 2 | 2 | 5 |

**5.** What is the relationship between the magic sum and the number in the middle cell?

multiply

**6.** Use the relationship you found at the left to complete these magic squares.

| 3 | 5 | 10 |
|---|---|---|
| 13 | 6 | −1 |
| 2 | 7 | 9 |

| 13 | 3 | 5 |
|---|---|---|
|  |  | 15 |
|  |  |  |

| 10 | 4 | 15 |
|---|---|---|
|  | 8 |  |
|  |  |  |

Name: _Yesenia_

Date: _____

**Warm-Up**

Complete these equations.

$6 - 3 =$ _3_  $\qquad$ $5 - 6 =$ _1_  $\qquad$ $-1 + 5 =$ _4_

$2 - 3 =$ _1_  $\qquad$ $9 - 11 =$ _2_  $\qquad$ $-3 + 2 =$ _-1_

$7 - 9 =$ _2_  $\qquad$ $1 - 5 =$ _4_  $\qquad$ $-1 + 8 =$ _7_

Complete the magic squares below.    _34_    _34_

**A** _32_

| 7 | 12 | 1 | 14 |
|---|----|---|----|
| 0 | 13 | 8 | 11 |
| 16 | 3 | 8 | 5 |
| 9 | 4 | 15 | 4 |

**B**

| 12 | 1 | 14 | 7 |
|----|---|----|---|
| 13 | 8 | 11 | 2 |
| 3 | 10 | 5 | 16 |
| 6 | 15 | 4 | 9 |

**C**

| 4 | 14 | 15 | 1 |
|---|----|----|---|
| 9 | 7 | 6 | 12 |
| 5 | 11 | 10 | 8 |
| 16 | 2 | 3 | 3 |

**D** _20_ _10_

| 0 | 3 | 4 | 13 |
|---|---|---|----|
| 10 | 0 | 10 | 0 |
| 17 | 4 | 6 | -7 |
| -7 | 13 | 0 | 14 |

**E** _34_

| 1 | 12 | 8 | 3 |
|---|----|---|---|
| 15 | 6 | 10 | 3 |
| 14 | 7 | 11 | 2 |
| 4 | 9 | 5 | 16 |

**F**

| 6 | 15 | 4 | 9 |
|---|----|---|---|
| 3 | 10 | 5 | 16 |
| 13 | 8 | 11 | 2 |
| 12 | 1 | 14 | 7 |

_34_

**G**

| 18 | -1 | -2 | 8 |
|----|----|----|---|
| 9 | 1 | 2 | 3 |
| -2 | 7 | 5 | 5 |
| -2 | 8 | 10 | 7 |

_7_ _15_

**H** _33_

| 1 | 14 | 14 | 4 |
|---|----|----|---|
| 11 | 7 | 6 | 9 |
| 8 | 10 | 10 | 5 |
| 13 | 2 | 3 | 15 |

1. Which two magic squares are reflections of each other? __G E__

2. Which two magic squares are rotations of each other? __H F__

3. Which three magic squares are not normal? __G F E I am so hungry and tired__

4. What is special about the sum of the 4 corners? __Because 789 I am so tired__

5. What is special about the sum of the inner squares? _____

6. Top middle numbers + ____33____ = magic sum.

7. Left middle numbers + ____34____ = magic sum.

8. Add the corresponding cells in magic squares G and H. Write the sums in the square at the right. What is its magic sum? __13 and 33__

|   |   |   |   |
|---|---|---|---|
|   |   |   |   |
|   |   |   |   |
|   |   |   |   |

Name: __Yesenia__

Date: _____

**Warm-Up**

Complete these equations.

$27 - 21 =$ __6__  $\qquad$ $114 - 115 =$ __-1__  $\qquad$ $10 - 30 =$ __-20__

$27 - 29 =$ __18__  $\qquad$ $128 - 130 =$ __-2__  $\qquad$ $40 - 50 =$ __-10__

$27 - 30 =$ __-3__  $\qquad$ $497 - 500 =$ __-3__  $\qquad$ $200 - 300 =$ __-100__

Terry found another way to subtract. Terry's friends like it because they don't need to use any facts like 14 – 9. Here are some examples. What do you think?

$87 - 49 = 40 - 2 = 38$
$516 - 394 = 200 - 80 + 2 = 122$
$7365 - 5468 = 2000 - 100 - 3 = 1897$

Before you say, "I don't get it," let Terry explain it to you.

> I start by subtracting the thousands.

> Now hundreds— oops, not enough. So I write – 100.

> Tens are easy: nothing to write.

$7365 - 5468 = 2000 \quad - \quad 100 \quad - \quad 3 \quad = \quad 1897$

> Not enough ones. So I write – 3.

> Then combine: 2000 – 100 = 1900 & 1900 – 3 = 1897.

Now you try it. Be sure to check your work.

$91 - 57 =$ __34__

$371 - 191 =$ __371-191=180__

$809 - 437 =$ __372__

$4792 - 3285 =$ __1507__

$3141 - 893 =$ __2248__

$7040 - 2769 =$ __7040-2769=4271__

Name: <u>Mew Velazquez</u>

Date: _____

**Warm-Up**

Use Terry's way to subtract. Use check numbers if you like.

719 − 521 = <u>200-10+8=198</u>

462 − 293 = <u>200-30-2=169</u>

Terry's friends liked to subtract Terry's way, but they wanted to write the subtraction vertically. Here are some examples. What do you think?

$$
\begin{array}{r} 54 \\ -\ 29 \\ \hline 30 \\ -5 \\ \hline 25 \end{array}
\qquad
\begin{array}{r} 852 \\ -\ 375 \\ \hline 500 \\ -20 \\ -3 \\ \hline 477 \end{array}
\qquad
\begin{array}{r} 6592 \\ -\ 3718 \\ \hline 3000 \\ -200 \\ 80 \\ -6 \\ \hline 2874 \end{array}
$$

Here is Terry again, explaining it to you.

$$
\begin{array}{r} 6592 \\ -\ 3718 \\ \hline 3000 \end{array}
\qquad
\begin{array}{r} 6592 \\ -\ 3718 \\ \hline 3000 \\ -200 \end{array}
\qquad
\begin{array}{r} 6592 \\ -\ 3718 \\ \hline 3000 \\ -200 \\ 80 \end{array}
\qquad
\begin{array}{r} 6592 \\ -\ 3718 \\ \hline 3000 \\ -200 \\ 80 \\ -6 \end{array}
\qquad
\begin{array}{r} 6592 \\ -\ 3718 \\ \hline 3000 \\ -200 \\ 80 \\ -6 \\ \hline 2874 \end{array}
$$

*I start by subtracting the thousands.*

*Now hundreds— oops, not enough. So I write –200.*

*Tens are easy: 90 – 10 = 80.*

*Not enough ones. So I write –6.*

*Then combine: 3000 – 200 = 2800 and 80 – 6 = 74. The sum is 2874.*

Now you try it. Be sure to check your work.

$$
\begin{array}{r} 62 \\ -\ 35 \\ \hline 30 \\ -3 \\ \hline 27 \end{array}
\qquad
\begin{array}{r} 910 \\ -\ 112 \\ \hline 800 \\ 00 \\ -2 \\ \hline 798 \end{array}
\qquad
\begin{array}{r} 859 \\ -\ 379 \\ \hline 500 \\ -20 \\ 0 \\ \hline 480 \end{array}
\qquad
\begin{array}{r} 6076 \\ -\ 4059 \\ \hline 2000 \\ 000 \\ 20 \\ -3 \\ \hline 2017 \end{array}
\qquad
\begin{array}{r} 3843 \\ -\ 3386 \\ \hline 0000 \\ 500 \\ -40 \\ -3 \\ \hline 457 \end{array}
\qquad
\begin{array}{r} 7083 \\ -\ 3259 \\ \hline 4000 \\ -200 \\ 30 \\ -6 \\ \hline 3864 \end{array}
\qquad
\begin{array}{r} 6005 \\ -\ 1009 \\ \hline 5000 \\ 000 \\ 00 \\ -3 \\ \hline 4907 \end{array}
$$

Name: __Mew Velazquez__

Date: _____

Write only the answers.

_____

_____

_____

Write the answers.

582 + 69 = __651__

87 + __???__ = 200

$(6 \div 3) + (6 \div 2) =$ __5__
    18          12

Add or subtract.

```
  9575        4763        9515        4012
+ 5592      + 5251      − 5592      − 1802
 15167       10014        4083        2210
```

Utah's population is two million nine hundred thousand eight hundred seventy-two. Underline the period names. Write the number using digits and commas. __2,900,872__

Fill in the blanks.

3 × __8__ = 24

8 × __8__ = 64

7 × __2__ = 14

__4__ × 11 = 44

__6__ × 9 = 54

6 × __4__ = 24

2 × __7__ = 14

Solve the problem.

Kendra wants to walk her dog for an hour. She has 25 minutes left to walk. How long has she walked so far?

35
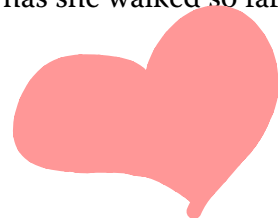
Draw lines to match the expressions.

| | |
|---|---|
| 16  4 × 4 | 16 × 2   32 |
| 40  8 × 5 | 6 × 5 + 6 × 2   42 |
| 32  8 × 4 | 5 × 5   25 |
| 25  20 + 5 | 8 × 2   16 |
| 63  9 × 7 | 6 × 7 − 2   40 |
| 42  6 × 7 | 50 − 1   49 |
| 8  32 ÷ 4 | 9 × 6 + 2   56 |
| 49  7 × 7 | 70 − 7   63 |
| 56  8 × 7 | 2 × 2 × 2   8 |

Complete the magic square.

27

| 14 | 5 | 1 | 7 |
|----|----|----|----|
| −1 | 7 | 8 | 13 |
| 6 | 4 | 8 | 9 |
| 8 | 11 | 9 | −2 |

Name: <u>Mew Velazquez</u>

Date: _____

Write only the answers.

_____

_____

_____

Add or subtract.

| 7864 | 9813 | 4603 | 7390 |
|---|---|---|---|
| + 3894 | + 9267 | − 1597 | − 3503 |
| 11758 | 19080 | 3006 | 3887 |

Write the answers.

674 + 86 = __760__

41 + __159__ = 200

(8 ÷ 4) + (8 ÷ 2) = __48__

*Divide not Multiply*

Hawaii's population is one million four hundred four thousand fifty-four. Underline the period names. Write the number using digits and commas. __1,404,054__

Fill in the blanks.

2 × __8__ = 16

6 × __6__ = 36

7 × __8__ = 56

11 × __6__ = 66

__4__ × 4 = 16

8 × __7__ = 56

__4__ × 9 = 36

Solve the problem.

Kevin is playing hockey for an hour. He has 35 minutes left to play. How long has he played already?

25

Draw lines to match the expressions.

| 81 9 × 9 | 8 × 3  24 |
|---|---|
| 35 7 × 5 | 10 × 8 − 8  72 |
| 24 6 × 4 | 90 − 9  81 |
| 74 8 × 8 | 6 × 6 − 1  35 |
| 72 9 × 8 | 80 − 16  74 |
| 56 50 + 6 | 7 × 8  56 |
| 5 40 ÷ 8 | 7 × 10 − 7  63 |
| 63 7 × 9 | 40 + 5  45 |
| 45 9 × 5 | 20 ÷ 4  5 |

Complete the magic square.

21

| 5 | 2 | 6 | 8 |
|---|---|---|---|
| 7 | 6 | −1 | 12 |
| 7 | 3 | 16 | 4 |
| 11 | 3 | 10 | −3 |

Name: __Mew Velazquez__

Date: _____

Solve these problems.

1. The populations of some states are:
California, 38,332,521; New York,
19,651,127; and Florida, 19,552,860. Does
California have more people than New
York and Florida together?

No

2. Peyton has $30.00 and is buying three
food items costing $9.49, $7.97, and
$11.53. Does Peyton have enough money?

$ 27.99 or $ 28

$$46$$
$$+ 53$$
$$\overline{99}$$

$$16$$
$$27.$$

$$97$$
$$+49$$
$$\overline{146} = 1.46$$

3. When Skylar awoke in the morning, the
temperature was −2°. By 3:00 p.m. the
temperature is 10 degrees warmer. What
is the temperature?

8

4. Avery is thinking of even numbers less
than 50 that when divided by 7 have a
remainder of 1. What are the numbers?

36,8,22,

5. Tony and his family are traveling to visit
relatives. The trip takes 2 hours and 40
minutes. If they leave at 9:10 and make
two stops of 15 minutes each, what time
will they arrive?

12:20am

```
   ` ` `
  19,651,127
+ 19,552,860
```
39,203,987

Name:  <u>Mew Velazquez</u>

Date:  _____

**Warm-Up**

Subtract. Use your favorite method.

$$\begin{array}{r} 6\overset{2\;10}{3\,8} \\ -\ 4\,2\,9 \\ \hline 2\,0\,1 \end{array} \qquad \begin{array}{r} \overset{6\;13\;12}{7\,4\,2} \\ -\ 2\,8\,9 \\ \hline 4\,5\,3 \end{array}$$

Solve these number puzzles by putting in symbols such as: +, −, =, ×, ÷ to make equations.

| 1 4 2 2 | 2 3 1 6 | 6 2 1 2 |
|---|---|---|
| <u>1x4=2+2</u> | <u>2x3=1x6</u> | <u>6/2=1+2</u> |
| <u>1x4-2=2</u> | <u>2+3+1=6</u> | <u>6=(2+1)2</u> |
| | | <u>6=2(1+2)</u> |

Put <, > or = in the ellipses. Do not perform the calculations, but decide the answer by noticing patterns. Be prepared to justify your work.

a.  384 + 197 + 802 $>$ 381 + 196 + 799

b.  363 − 236 + 220 $<$ 363 − 236 + 234

c.  4765 − 2280 $>$ 4765 − 2995

d.  994 + 994 + 994 $<$ 994 × 4

e.  45 × 10 $=$ 45 × 5 × 2

f.  $\overset{160}{79 + 81}$ $=$ $\overset{160}{80 \times 2}$

g.  170 ÷ 2 $>$ 170 ÷ 5

h.  682 ÷ 3 $<$ 696 ÷ 3

i.  491 − 493 $<$ 0

j.  37 × 80 × 923 $=$ 923 × 80 × 37

Put <, > or = in the circles.

k. 14 × 68 $>$ 2 × 4 × 68 _____

_____

l. 5716 − 378 $>$ 5720 − 382 _____

_____

m. 6472 − 2959 $<$ 6472 − 2859 _____

_____

n. 819 × 3 + 819 $=$ 819 × 4 _____

_____

o. 712 ÷ 9 $<$ 712 ÷ 8 _____

_____

3+4-2=5

Name: _____

Date: _____

**Warm-Up**

Find two solutions for these number puzzles. Make equations by putting in symbols such as: +, −, =, ×, ÷ .

1 2 3 4

1=(2+3)-4

-1+2+3=4

5 1 1 6

5x1+1=6

5+1=1x6

Find the products. Write the partial products.

|   |   | 5 | 4 |   |
|---|---|---|---|---|
|   | 3 | 6 | 5 |   |
|   |   | × | 9 |   |
| 3 | 2 | 8 | 5 |   |

|   |   | 7 | 3 |   |
|---|---|---|---|---|
|   | 8 | 9 | 4 |   |
|   |   | × | 8 |   |
| 7 | 1 | 5 | 2 |   |

32

*2 2 4*

|   | 1 | 4 | 6 | 8 |
|---|---|---|---|---|
|   |   |   | × | 5 |
| 7 | 3 | 4 | 0 |   |

|   |   | 2 | 4 | 3 |
|---|---|---|---|---|
|   | 1 | 3 | 7 | 6 |
|   |   |   | × | 6 |
| 8 | 2 | 5 | 6 |   |

*4 6*

|   | 5 | 6 | 0 | 8 |
|---|---|---|---|---|
|   |   |   | × | 8 |
| 4 | 4 | 8 | 6 | 4 |

*7 6 5*

|   | 9 | 8 | 7 | 6 |
|---|---|---|---|---|
|   |   |   | × | 9 |
| 8 | 8 | 8 | 4 |   |

*2 3 3*

|   | 3 | 5 | 7 | 9 |
|---|---|---|---|---|
|   |   |   | × | 4 |
| 1 | 4 | 3 | 1 | 6 |

*1 6 4*

|   | $ | 5 | 1 | 8 | 6 |
|---|---|---|---|---|---|
|   |   |   |   | × | 7 |
| $ | 3 | 6 | 3 | 0 | 2 |

Name: _____

Date: _____

**Warm-Up**

Find the products using partial products. Use your abacus if needed.

$$
\begin{array}{r}
\overset{2}{\phantom{0}} \\
3\ 8\ 2 \\
\times\ 3 \\
\hline
1\ 1\ 4\ 6
\end{array}
$$

$$
\begin{array}{r}
\overset{1}{\phantom{0}} \\
6\ 3\ 9 \\
\times\ 2 \\
\hline
1\ 2\ 7\ 8
\end{array}
$$

Use your abacus to do the following multiplications.

Multiply the number on the abacus by 2.



$$
\begin{array}{r}
\overset{1}{\phantom{0}} \\
2\ 8\ 6\ 2 \\
\times\ \phantom{000}2 \\
4\ 7\ 2\ 4
\end{array}
$$
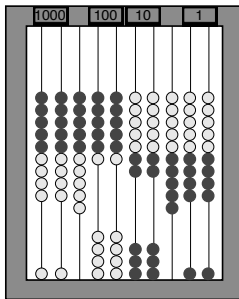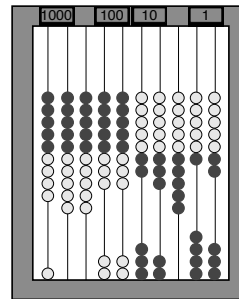
TELL ME HOW
TO READ THIS

Multiply the number on the abacus by 6.
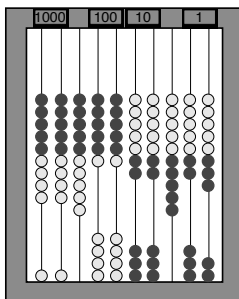
$$
\begin{array}{r}
2\ 3\ 4 \\
1\ 4\ 5\ 7 \\
\times\ \phantom{000}6 \\
8\ 7\ 4\ 2
\end{array}
$$

Multiply the number on the abacus by 4.

$$
\begin{array}{r}
3\ 2\ 2 \\
2\ 8\ 6\ 5 \\
\times\ \phantom{000}4 \\
1\ 1\ 4\ 8\ 0
\end{array}
$$

Multiply the number on the abacus by 8.

$$
\begin{array}{r}
2\ \phantom{0}7 \\
1\ 3\ 0\ 9 \\
\times\ \phantom{000}8 \\
1\ 0\ 4\ 7\ 2
\end{array}
$$

Multiply the number on the abacus by 7.

$$
\begin{array}{r}
5 \\
9\ 8\ 7 \\
\times\ \phantom{00}7 \\
6\ 8\ 6\ 9
\end{array}
$$
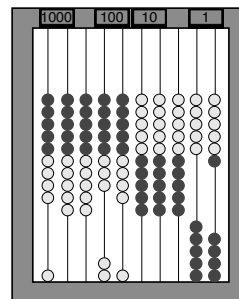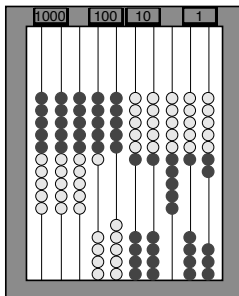
Multiply the number on the abacus by 5.

$$
\begin{array}{r}
4\ 4\ 3 \\
2\ 8\ 9\ 7 \\
\times\ \phantom{000}5 \\
1\ 4\ 4\ 8\ 5
\end{array}
$$
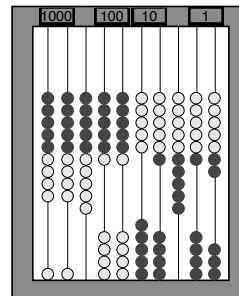
Name: _____

Date: _____

a.

Use partial products.    Add.    Multiply.

```
  3 2 1 3        3 2 1 3        3 2 1 3
×       3        3 2 1 3      ×       3
  9 4 3 9      + 3 2 1 3        9 6 3 9
                 9 4 3 9
```

Multiply.

```
  1
  1 3 2 0  ( )
×       4  ( )
  5 2 8 0  ( )
```

```
  4 1 4
  3 8 2 9  ( )
×       5  ( )
1 9 1 4 5  ( )
```

b.

Use partial products.    Add.    Multiply.

```
    2 1 2
  3 8 4 9        3 8 4 9        3 8 4 9
×       3        3 8 4 9      ×       3
1 1 5 4 7      + 3 8 4 9      1 1 5 4 7
               1 1 5 4 7
```

```
  5 4 1
  4 6 7 2  ( )
×       6  ( )
2 9 0 3 2  ( )
```

```
    1 3
  7 0 1 5  ( )
×       7  ( )
4 9 1 0 5  ( )
```

c.

Add.

```
  4 5 1 9  ( )
  4 5 1 9  ( )
  4 5 1 9  ( )
  4 5 1 9  ( )
  4 5 1 9  ( )
+ 4 5 1 9  ( )
2 7 1 1 4  ( )
```

Multiply. Use check numbers.

```
  3 1 5
  4 5 1 9  ( )
×       6  ( )
2 7 1 1 4  ( )
```

```
  3 4 4
  3 3 7 5  ( )
×       8  ( )
2 7 0 0 0  ( )
```

```
  4 7 7
  5 6 7 8  ( )
×       9  ( )
5 1 1 0 2  ( )
```

When you find 6824 taken 7 times, which method is easiest—partial products, adding, or multiplying? Why?   Multiplying is better because ItS eRtH wOrM sAlLy CaRiNG DeSiEsE FrOm FlOrDiA tO cAlIe that's why also because it's easier

_____

*Worksheet 21, Multiplication Comparisons*

Name: _____

Date: _____

**Warm-Up**

Complete the magic square.

2 0

| 6 | −2 | 9 | 7 |
| 4 | 8 | 3 | 5 |
| 10 | 10 -2 | | 1 |
| 0 | 4 | 9 | 7 |

Find two solutions for this number puzzle.
Make equations by putting in symbols
such as: +, −, =, ×, ÷ .

1 2 2 4

_____

_____

Write equations and solve the following problems.

1. Sherry is 11 years old. Her grandfather is 7 times older than she is. How old is her grandfather? How much younger is Sherry than her grandfather?

Sherrys grandfather is 77. Sherry is 66 years younger then her grandfather.

_____

_____

2. The Confederation Bridge in Canada is 8 miles long. Lake Pontchartrain Causeway in Louisiana is 24 miles long. How many times longer is the causeway than the bridge? How much longer is the causeway than the bridge?

The causeway is 3 times longer then the bridge. The causeway is 16 miles longer then the bridge

_____

_____

3. At birth an elephant weighs about 100 kg. When it is grown, it weighs 35 times as much. How much is that? How much weight did the baby gain growing up?

The baby will weigh 3,500 kg. The baby has gained 1,500 or I think.

_____

_____

4. Harry is 4 ft tall. A foot is 12 times longer than an inch. How tall is Harry in inches?

48 inches

_____

_____

$4 \times 12$

Name: <mark>Yesenia Velazquez</mark>

Date: _____

Write only the answers.

_____

_____

_____

Write the answers.

641 + 273 = __914__

49 + __551__ = 600

(12 ÷ 3) + (12 ÷ 2) = __60__
       3 6       24

Do the arithmetic.

$$\begin{array}{r} \overset{1\ 1}{8374}\ (\ ) \\ +\ 3558\ (\ ) \\ \hline 11932 \end{array}$$

$$\begin{array}{r} \overset{6\ 9\ 9\ 10}{\cancel{7000}}\ (\ ) \\ -\ 2001\ (\ ) \\ \hline 4999 \end{array}$$

$$\begin{array}{r} \overset{1\ 3}{629}\ (\ ) \\ \times 4\ (\ ) \\ \hline 2514 \end{array}$$

$$\begin{array}{r} \overset{3\ 1}{4172}\ (\ ) \\ \times 5\ (\ ) \\ \hline 20860 \end{array}$$

Multiply and add.

$1 \times 9 + 2 =$ __11__    $12 \times 9 + 3 =$ __111__    $123 \times 9 + 4 =$ __1,111__    $1234 \times 9 + 5 =$ __11,111__

Solve the problems.

Sam earned \$7.75 on Tuesday and \$7.25 on Thursday. Then Sam bought some items. They cost 99¢, \$11.05, and \$2.15. How much money does Sam have left?

_____79¢_____

_____

_____

_____

15
$\overline{\phantom{1}}$
1
11
2

2
23
× 8
18 4

Steel is 8 times heavier than ice. If a cube of ice weighs 23 g, what would the cube weigh if it were made of steel?

__184 grams__

_____

_____

The sun is one hundred forty-nine billion five hundred ninety-seven million eight hundred seventy thousand seven hundred meters from Earth. Write this number with numerals.

__149,597,870,700__

Name: __Yesenia Velazquez__

Date: _____

| **Warm-Up** |
| --- |

Multiply.

$$\begin{array}{r} \overset{2}{2}\,7 \\ \times\ 3 \\ \hline 8\,1 \end{array}\ (\ )$$
$$\begin{array}{r} \overset{4}{4}\,6 \\ \times\ 8 \\ \hline 3\,4\,8 \end{array}\ (\ )$$
$$\begin{array}{r} \overset{2}{9}\,4 \\ \times\ 6 \\ \hline 5\,6\,4 \end{array}\ (\ )$$
$$\begin{array}{r} \overset{1\ 4}{1\,2}\,9 \\ \times\ 5 \\ \hline 6\,4\,5 \end{array}\ (\ )$$

For each problem, write the fraction of the rectangle that is crosshatched on the line.

1. Divide the rectangle into fourths and each fourth into halves. Crosshatch 3 pieces.   $\dfrac{3}{4}$
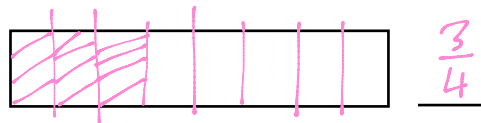
2. Divide the rectangle into halves and each half into thirds. Crosshatch 2 pieces.   $\dfrac{2}{2}$

3. Divide the rectangle into thirds and each third into thirds. Crosshatch 5 pieces.   $\dfrac{5}{3}$

4. Crosshatch one half of this rectangle.   $\dfrac{1}{2}$

   Also crosshatch one half of this rectangle and then divide each half into halves.   $\dfrac{1}{4}$

   Crosshatch one half of this rectangle and then divide each half into halves and each of those halves in half.   $\dfrac{1}{3}$

5. Crosshatch two thirds of this rectangle.   $\dfrac{2}{3}$

   Crosshatch two thirds of this rectangle. Divide each third in half.   $\dfrac{2}{5}$

   Crosshatch two thirds of this rectangle. Divide each third in half. Then divide each piece in half again.   $\dfrac{2}{12}$
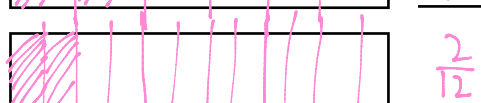
6. Divide the rectangle into fourths and each fourth into thirds. Crosshatch one piece.   $\dfrac{1}{12}$

   Divide the rectangle into thirds and each third into fourths. Crosshatch one piece.   $\dfrac{1}{12}$
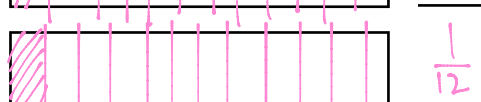
7. Divide the rectangle in half, but draw the line only halfway down. Divide the halves in half, but draw the lines only one fourth the way down. Divide the fourths in half, but draw the lines only one eighth the way down.
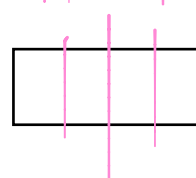
Name: _____

Date: _____

## Warm-Up

Do the arithmetic.

$$4982\ (\ ) \\ +\ 2894\ (\ ) \\ \overline{7876}$$

$$4982\ (\ ) \\ -\ 2894\ (\ ) \\ \overline{2088}$$

$$498\ (\ ) \\ \times\ 4\ (\ ) \\ \overline{1492}$$

$$2894\ (\ ) \\ \times\ 7\ (\ ) \\ \overline{8}$$

This rectangle is 1 inch long.
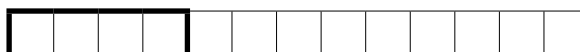
1. Draw a rectangle $1\frac{1}{2}$ inches long.

2. Draw a rectangle $1\frac{1}{4}$ inches long.

3. Draw a rectangle $1\frac{3}{4}$ inches long.

4. Draw a rectangle 2 inches long.

5. Draw a rectangle $\frac{1}{8}$ inch long.

6. Draw a rectangle $2\frac{1}{8}$ inches long.

7. Draw a rectangle $2\frac{1}{4}$ inches long.

From the cards shown on the right, choose the correct card to make each row below equal 1 and write the card in. Use your fraction chart if needed.

$\boxed{\frac{1}{2}}$ $\boxed{\frac{1}{3}}$ $\boxed{\frac{1}{8}}$ $\boxed{\frac{1}{2}}$ $\boxed{\frac{7}{10}}$ $\boxed{\frac{3}{8}}$ $\boxed{\frac{2}{5}}$ $\boxed{\frac{1}{8}}$ $\boxed{\frac{1}{4}}$
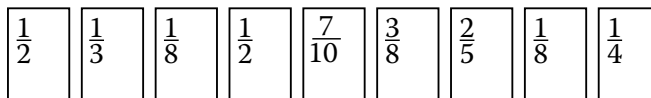
8. $\boxed{\frac{7}{8}}$ $\boxed{\frac{1}{8}}$

9. $\boxed{\frac{1}{2}}$ $\boxed{\frac{1}{4}}$ $\boxed{\frac{1}{4}}$

10. $\boxed{\frac{2}{5}}$ $\boxed{\frac{1}{5}}$ $\boxed{\frac{2}{5}}$

11. $\boxed{\frac{1}{3}}$ $\boxed{\frac{1}{6}}$ $\boxed{\frac{1}{2}}$

12. $\boxed{\frac{1}{10}}$ $\boxed{\frac{1}{10}}$ $\boxed{\frac{3}{10}}$ $\boxed{\frac{1}{2}}$

13. $\boxed{\frac{1}{10}}$ $\boxed{\frac{1}{5}}$ $\boxed{\frac{7}{10}}$

14. $\boxed{\frac{1}{2}}$ $\boxed{\frac{1}{8}}$ $\boxed{\frac{3}{8}}$

15. $\boxed{\frac{1}{4}}$ $\boxed{\frac{1}{2}}$ $\boxed{\frac{1}{8}}$ $\boxed{\frac{1}{8}}$

16. $\boxed{\frac{1}{6}}$ $\boxed{\frac{1}{3}}$ $\boxed{\frac{1}{6}}$ $\boxed{\frac{1}{3}}$

Name: _Xesenia_

Date: _____

Write only the answers.

5,400

237

640

80
× 8
440

Write the answers.

746 + 84 = 830

45 + 955 = 1000

$2\frac{2}{5} + 1\frac{3}{5} =$ 4

744
+ 84
830

Do the arithmetic. Use check numbers.

24,479 ( )
+ 37,548 ( )
62,024

9047 ( )
− 3567 ( )
5480

8529 ( )
× 7 ( )
59,703

4172 ( )
× 5 ( )
20,840

The population of Red Deer and the nearby area is 100,807. Write this number in words.

One hundred thousand eight hundred in seven

Write >, <, or = on the lines.

$\frac{1}{2}$ of 4 __>__ $\frac{1}{2}$ of 2

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

$1 + \frac{1}{2}$ __=__ $1\frac{1}{2}$

$\frac{2}{3}$ __>__ $\frac{2}{4}$

$\frac{3}{3}$ __=__ $\frac{4}{4}$

$\frac{1}{6}$ __<__ $\frac{5}{6}$

Solve the problem.

Aidan earned $16 on Tuesday and three times as much on Saturday. How much did Aidan earn on Saturday? How much did Aidan earn on both days?

16
× 3
48

48
+16
64

64

Draw lines to match the expressions.

one half ——— 4

3 ÷ 2 ——— $\frac{1}{2}$

one half of 8 — $\frac{2}{3}$

$\frac{1}{2}$ of $\frac{1}{2}$ — $1\frac{1}{2}$

$\frac{1}{3} \times 2$ — $\frac{1}{4}$

$\frac{1}{10} + \frac{9}{10}$ — $\frac{7}{10}$

6 ÷ 2 — 1

$1 - \frac{3}{10}$ — $\frac{6}{2}$

Crosshatch $\frac{2}{3}$ of the hexagon.
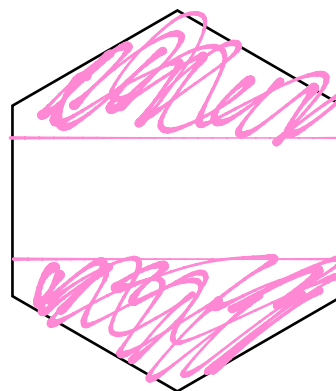
Name: _____

Date: _____

Write only the answers.

_____

_____

_____

Write the answers.

$657 + 94 =$ _____

$63 +$ _____ $= 1000$

$1\frac{5}{6} + 2\frac{1}{6} =$ _____

Do the arithmetic. Use check numbers.

$$42{,}974\ (\ )$$
$$+\ 38{,}845\ (\ )$$

$$8703\ (\ )$$
$$-\ 4596\ (\ )$$

$$2958\ (\ )$$
$$\times\ 8\ (\ )$$

$$7251\ (\ )$$
$$\times\ 6\ (\ )$$

The population of Markham, Ontario, is 301,709. Write this number in words.

_____

Write >, <, or = on the lines.

$\frac{1}{2}$ of 3 _____ $\frac{1}{2}$ of 4

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

$\frac{1}{2} + 1$ _____ $1\frac{1}{2}$

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

$\frac{2}{2}$ _____ $\frac{8}{8}$

$\frac{1}{8}$ _____ $\frac{5}{8}$

Solve the problem.

James and his friends earned $24 on Friday and three times as much on Saturday. How much did they earn on Saturday? How much did they earn on both days?

Draw lines to match the expressions.

| | |
|---|---|
| one third | 3 |
| $5 \div 2$ | $\frac{1}{3}$ |
| one half of 6 | $\frac{2}{5}$ |
| $\frac{1}{2}$ of $\frac{1}{3}$ | $2\frac{1}{2}$ |
| $\frac{1}{5} \times 2$ | $\frac{1}{6}$ |
| $\frac{3}{10} + \frac{7}{10}$ | $\frac{9}{10}$ |
| $7 \div 2$ | 1 |
| $1 - \frac{1}{10}$ | $\frac{7}{2}$ |

Crosshatch $\frac{3}{4}$ of the octagon.
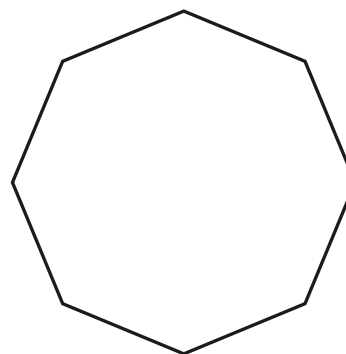
Name: _____

Date: _____

## Warm-Up

Do the arithmetic. Use check numbers.

$$7268 \;(\;) $$
$$+\; 2687 \;(\;) $$
9455

$$7268 \;(\;) $$
$$-\; 2687 \;(\;) $$
4581

$$726 \;(\;) $$
$$\times\; 8 \;(\;) $$
5,808

$$2687 \;(\;) $$
$$\times\; 3 \;(\;) $$
8,061

Solve these problems. Explain your answers.

1. Which rectangle has the greater perimeter?

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

$2\frac{1}{8}$     $2\frac{3}{4}$

_____

_____

_____

_____
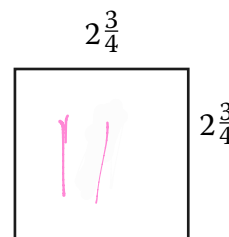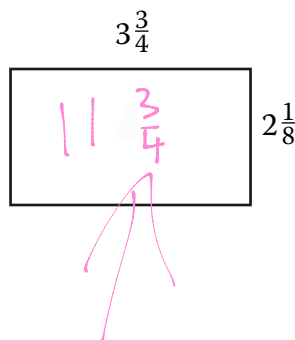
12 in = 1 f

2. Sammy is making a craft project and has one foot of very expensive ribbon. Sammy cuts pieces $1\frac{1}{4}$, $1\frac{3}{4}$, $2\frac{5}{8}$, $2\frac{3}{4}$, $\frac{7}{8}$, and $1\frac{1}{2}$ inches long. How much ribbon is left? Explain your work.

$10\frac{3}{4}$ in

_____

_____

_____

_____

*Worksheet 32, Comparing Fractions*

Name: _Yulenia_

Date: _____

### Warm-Up

Do the arithmetic. Use check numbers.

$$5854 \; (\;) \\ + 4585 \; (\;) \\ \overline{10439}$$

$$5854 \; (\;) \\ - 4585 \; (\;) \\ \overline{1269}$$

$$585 \; (\;) \\ \times 6 \; (\;) \\ \overline{3510}$$

$$4585 \; (\;) \\ \times 7 \; (\;) \\ \overline{32095}$$

Solve these problems.

1. The perimeter of each regular figure below is 13 cm. What is the length of the sides of each figure?



_____

_____

_____

_____
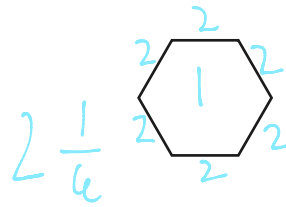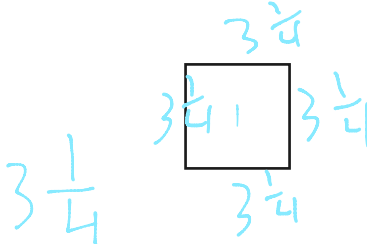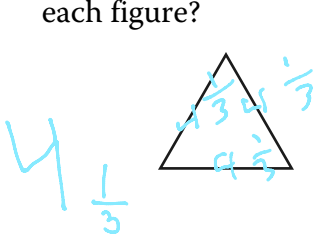
2. Find of the perimeter of the square and the regular octagon. Which has the greater perimeter?
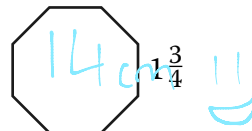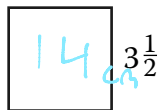


_____

_____

_____

_____

Name: _____

Date: _____

**Warm-Up**

Do the arithmetic. Use check numbers.

$$7642 \; (\;) \\ +\, 2467 \; (\;) \\ \overline{10109}$$

$$7642 \; (\;) \\ -\, 2467 \; (\;) \\ \overline{5175}$$

$$764 \; (\;) \\ \times\, 8 \; (\;) \\ \overline{\phantom{xxxx}}$$

$$2467 \; (\;) \\ \times\, 4 \; (\;) \\ \overline{9848}$$

1. Divide the rectangles by drawing vertical lines. Draw the lines freehand.

   a. First find $\frac{1}{2}$ of the rectangle.
   Then crosshatch $\frac{1}{3}$ of $\frac{1}{2}$.

   c. Find $\frac{1}{2}$ of the rectangle.
   Then crosshatch $\frac{3}{4}$ of $\frac{1}{2}$.
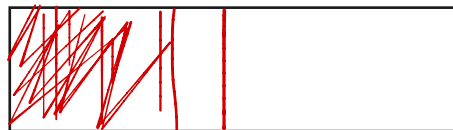
   b. First find $\frac{1}{3}$ of the rectangle.
   Then crosshatch $\frac{1}{2}$ of $\frac{1}{3}$.

   d. Find $\frac{3}{4}$ of the rectangle.
   Then crosshatch $\frac{1}{2}$ of $\frac{3}{4}$.
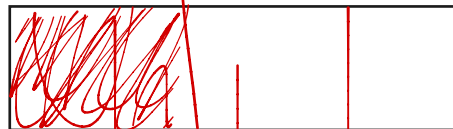
   What pattern do you see? _____

2. There are six rectangles below. Crosshatch $\frac{2}{3}$ of 6. How many thirds are crosshatched? __2__
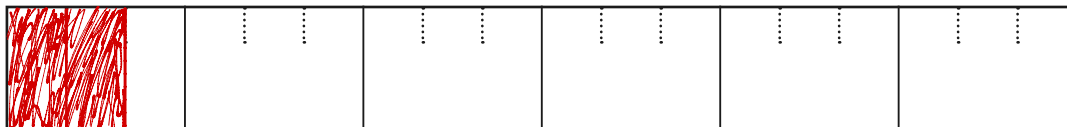
   Now let's find $\frac{2}{3} \times 6$ a different way. Crosshatch $\frac{2}{3}$ of a rectangle. Repeat six times. Do not leave any gaps between the thirds. How many thirds are crosshatched? __12__
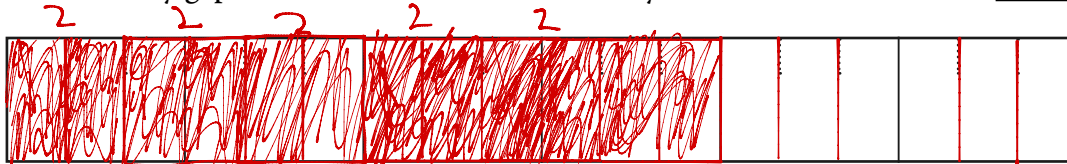
Name: _____

Date: _____

**Warm-Up**

Do the arithmetic. Use check numbers.

$$\begin{array}{r} {\scriptstyle 1\ 1\ 1} \\ 6374\ (\ ) \\ +\ 4736\ (\ ) \\ \hline 11{,}110 \end{array} \qquad \begin{array}{r} {\scriptstyle 5\ 13\ 6\ 14} \\ 6374\ (\ ) \\ -\ 4736\ (\ ) \\ \hline 1638 \end{array} \qquad \begin{array}{r} {\scriptstyle 1\ 2} \\ 637\ (\ ) \\ \times\ 4\ (\ ) \\ \hline 2548 \end{array} \qquad \begin{array}{r} {\scriptstyle 5\ 2\ 4} \\ 4736\ (\ ) \\ \times\ 8\ (\ ) \\ \hline ,888 \end{array}$$

1. What fraction are these inches divided into? _____

   Crosshatch the inch rectangles below.

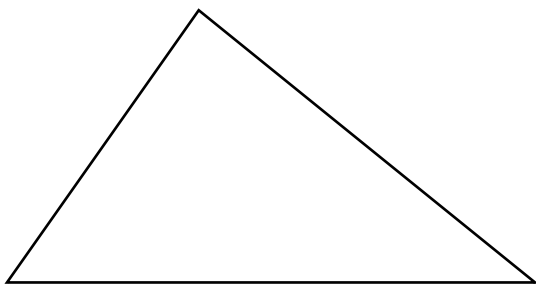   | 1 inch | 1 inch | 1 inch |
   |--------|--------|--------|
   | Crosshatch $\frac{3}{4}$. | Crosshatch $\frac{3}{8}$. | Crosshatch $\frac{5}{8}$. |
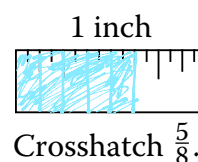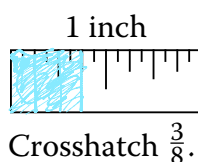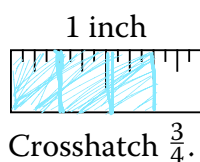
2. Write the numbers below the ruler to show the inches.

   Draw lines inside the rectangle that are $1\frac{1}{4}$, $2\frac{3}{4}$, $4\frac{1}{2}$, and $5\frac{5}{8}$ inches long. Use the ruler below.
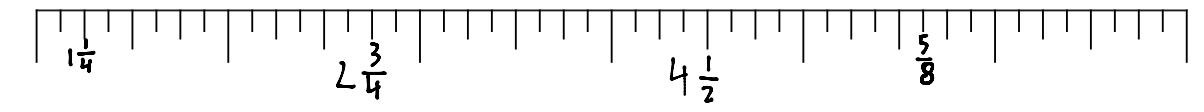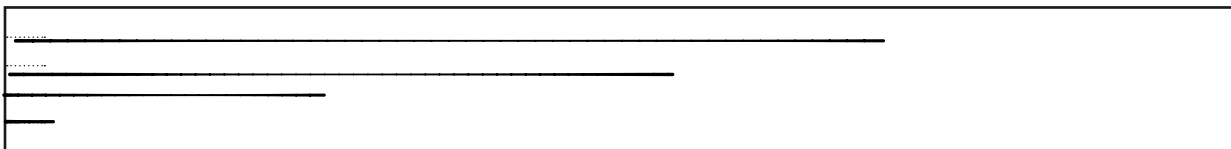
   $1\frac{1}{4}$   $2\frac{3}{4}$   $4\frac{1}{2}$   $\frac{5}{8}$

3. Use a ruler and find the perimeter of the two figures to the nearest eighth of an inch.

   _____   _____

   _____   _____

   _____   _____

Name: _____

Date: _____

Write only the answers.

7400
317
———
810

Write the answers.

389 + 78 = 447

61 + 939 = 1000

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

389
+78
———

Do the arithmetic. Use check numbers.

4 13 12 12
7432 ( )
− 888 ( )
———
6544

453
7685 ( )
× 6 ( )
———
46110

144
6369 ( )
× 7 ( )
———
44583

Add 387 + 10,793.

1944
+ 972
———
2914

Write >, <, or = on the lines.

$\frac{1}{2}$ of 4 $=$ $\frac{1}{2} \times 4$

$\frac{2}{5}$ $<$ $\frac{4}{5}$
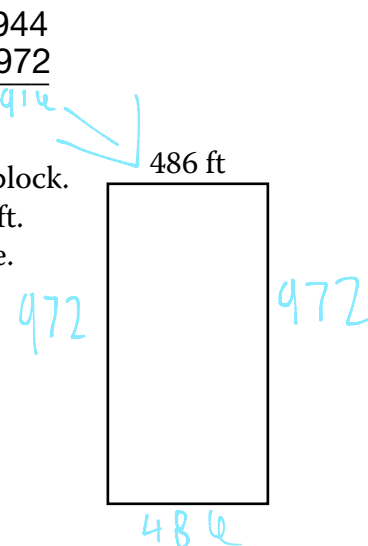
$1 + \frac{4}{7}$ $=$ $1\frac{4}{7}$

$\frac{5}{6}$ $>$ $\frac{4}{5}$

$\frac{7}{10}$ $<$ $\frac{7}{8}$

$\frac{11}{8}$ $=$ $1\frac{3}{8}$

Solve the problem.

Willie walked around a rectangular block.
The north side of the block was 486 ft.
The west side was twice this distance.
How far did Willie walk?

486 ft

972

972

486

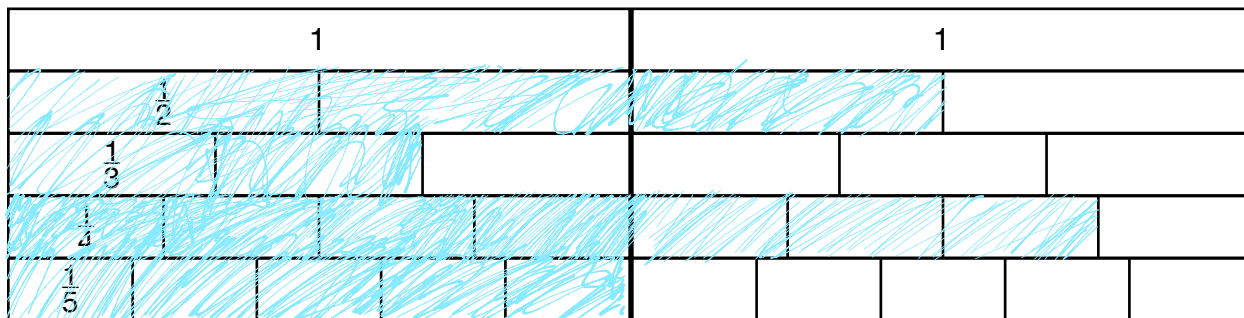Circle the improper fractions.

(9/8) (7/1) 2/3 (6/6) 12/13 5/6

Put these fractions in order from least to greatest.

$\frac{5}{4}$ $\frac{7}{8}$ $\frac{3}{5}$ $\frac{1}{3}$ $\frac{17}{8}$ $\frac{1}{4}$

$\frac{1}{4}$ $\frac{1}{3}$ $\frac{3}{5}$ $\frac{7}{8}$ $\frac{5}{4}$ $\frac{17}{8}$

On the fraction charts below, crosshatch $1\frac{1}{2}$, $\frac{2}{3}$, $\frac{7}{4}$, and $\frac{5}{5}$.

Name: _____

Date: _____

Write only the answers.

_3800_

_271_

_720_

Write the answers.

576 + 85 = _661_

73 + _927_ = 1000

$2 - 1\frac{1}{4} =$ _$\frac{3}{4}$_

Do the arithmetic. Use check numbers.

$$\begin{array}{r} {\tiny 5\,12\,13\,15} \\ 63\cancel{4}5 \;(\;) \\ -\;\;548\;(\;) \\ \hline 5{,}797 \end{array}$$

$$\begin{array}{r} {\tiny 444} \\ 5867\;(\;) \\ \times\;\;7\;(\;) \\ \hline 41\,069 \end{array}$$

$$\begin{array}{r} {\tiny 525} \\ 7849\;(\;) \\ \times\;\;6\;(\;) \\ \hline 47{,}094 \end{array}$$

Add 268 + 23,564.

_23832_

Write >, <, or = on the lines.

$\frac{1}{3} \times 6$ _=_ $\frac{1}{3}$ of 6

$\frac{5}{8}$ _>_ $\frac{3}{8}$

$2 + \frac{5}{7}$ _=_ $2\frac{5}{7}$
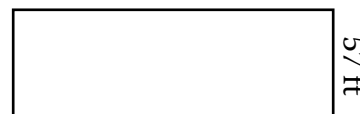
$\frac{7}{8}$ _<_ $\frac{8}{9}$

$\frac{3}{10}$ _<_ $\frac{3}{8}$

$\frac{13}{8}$ _=_ $1\frac{5}{8}$

Solve the problem.

Matt's dog, Barky, ran around her pen. The east side of the pen was 57 ft. The south side was three times this distance. How far did Barky run?

57 ft

$$\begin{array}{r}{\scriptsize 2}\\ 57 \\ \times\;3 \\ \hline 171 \end{array} \quad \begin{array}{r}{\scriptsize 1}\\ 171 \\ \times\;2 \\ \hline 342 \end{array} \quad \begin{array}{r}{\scriptsize 1}\\ 57 \\ \times\;2 \\ \hline 114 \end{array} \quad \begin{array}{r} 342 \\ +114 \\ \hline 456 \end{array}$$

**456**

Circle the improper fractions.

$\frac{7}{8}$ $\boxed{\frac{7}{3}}$ $\boxed{\frac{2}{1}}$ $\boxed{\frac{6}{6}}$ $\frac{1}{5}$ $\boxed{\frac{7}{6}}$

Put these fractions in order from least to greatest.

$\frac{4}{4}$ $\quad$ $\frac{1}{8}$ $\quad$ $\frac{4}{7}$ $\quad$ $\frac{2}{5}$ $\quad$ $\frac{15}{8}$ $\quad$ $\frac{1}{6}$

$\frac{1}{8}$ $\frac{1}{6}$ $\frac{2}{5}$ $\frac{4}{7}$ $\frac{4}{4}$ $\frac{15}{8}$ _____

On the fraction charts below, crosshatch $\frac{2}{2}$, $\frac{4}{3}$, $\frac{3}{4}$, and $\frac{7}{5}$.

| 1 | | 1 |
|---|---|---|