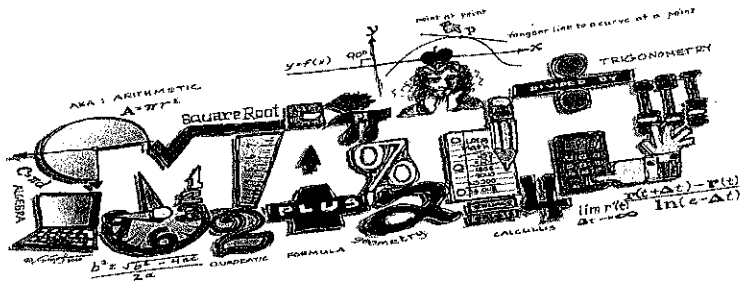


If AVAILABLE: Students should complete 30 minutes of ALEKS daily too!

Email your teacher & Mr. Sayers for log-in info from 9:30 - 11am or 1pm-2:30 pm  
[scott.sayers@richlandone.org](mailto:scott.sayers@richlandone.org), [Dominique.bennett@richlandone.org](mailto:Dominique.bennett@richlandone.org)

MATH 180



7<sup>th</sup> Grade  
 Suggested Timeline  
 Technology-Free Alternative

All assignments will be **GRADED!** Please be sure to submit your completed packet **NO LATER THAN 5 days** upon returning to school.

Days	Activity
	Math Essentials Workbook Read all the items in the margins and complete the activities as directed.
1	Positive Numbers and the Number Line (1)
2	Positive Numbers and the Number Line (2)
3	Fraction Number Line
4	Multiples
5	Squares and Square Roots
6	Multiplying Decimals
7	Improper Fractions and Mixed Numbers
8	Reciprocals
9	Multiplying Fractions
10	Ratios

Name \_\_\_\_\_

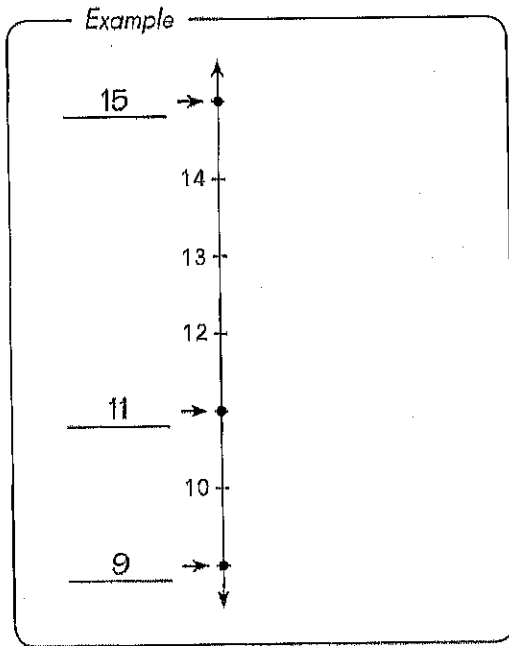




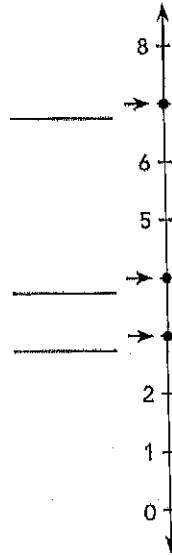
Name: \_\_\_\_\_

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

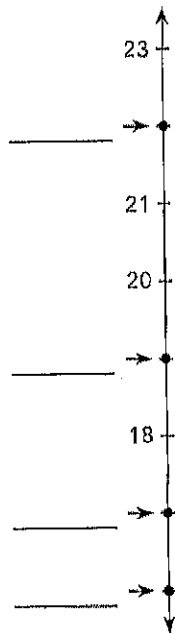
**Complete the number lines.**



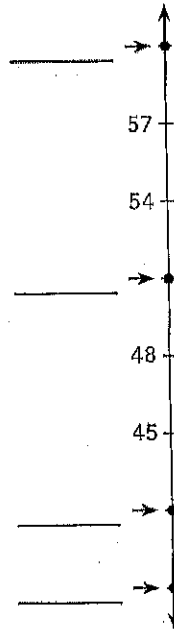
8.



9.



10.



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

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

CHAPTER



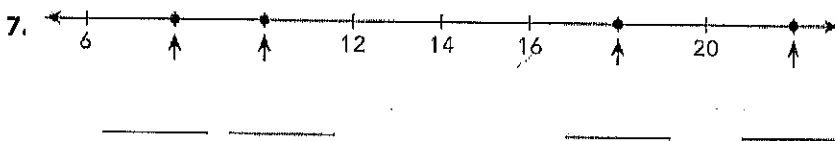
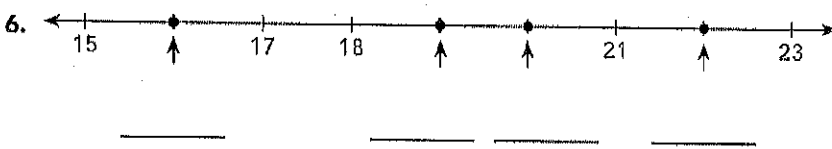
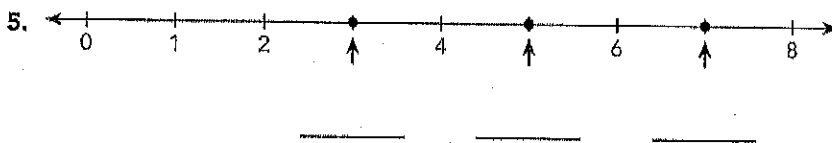
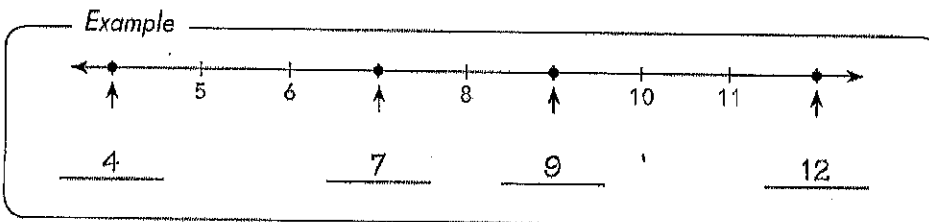
# Positive Numbers and the Number Line

## Lesson 1.1 The Number Line

Complete the number patterns.

- \_\_\_\_\_, 29, 30, \_\_\_\_\_, 32, \_\_\_\_\_, 34, 35
- 2, 4, \_\_\_\_\_, 8, 10, \_\_\_\_\_, 14, \_\_\_\_\_
- \_\_\_\_\_, 15, 18, \_\_\_\_\_, 24, 27, 30
- 8, 12, 16, 20, \_\_\_\_\_, 28, \_\_\_\_\_, 36

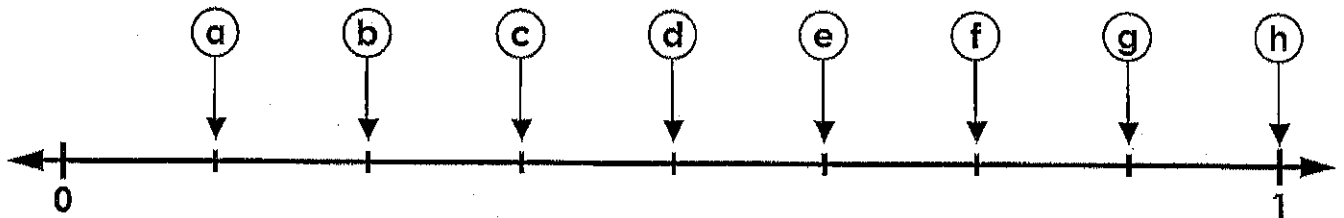
Complete the number lines.



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

## Fractions Number Line

Write the correct letter on the blank line next to each fraction.



$\frac{1}{2}$     d   

$\frac{7}{8}$            

$\frac{1}{4}$            

$\frac{8}{8}$            

$\frac{5}{8}$            

$\frac{3}{4}$            

$\frac{1}{8}$            

$\frac{3}{8}$            

Compare the fractions using  $<$ ,  $>$ , and  $=$ .

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

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

$\frac{5}{8} \bigcirc \frac{3}{4}$

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

$\frac{7}{8} \bigcirc \frac{1}{4}$

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

$\frac{1}{4} \bigcirc \frac{7}{8}$

$\frac{8}{8} \bigcirc 1$

$\frac{1}{2} \bigcirc \frac{6}{8}$

Mrs. Browning asked her class to help with safety patrol.  $\frac{4}{8}$  of the class went with her to help younger students onto the buses. Mr. Tobias took  $\frac{1}{2}$  of the class to help students at the crosswalk. Compare the fractions of the class that went with each teacher using  $<$ ,  $>$ , or  $=$ .

Mrs. Browning  $\frac{4}{8} \bigcirc \frac{1}{2}$  Mr. Tobias

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

## Multiples

A **multiple** is the product of a given whole number and another whole number.

$1 \times 6 = 6$

$2 \times 6 = 12$

$3 \times 6 = 18$

$4 \times 6 = 24$

$5 \times 6 = 30$

$6 \times 6 = 36$

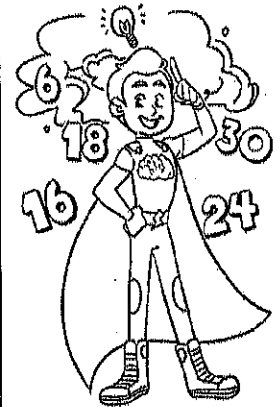
$6 \times 7 = 42$

$6 \times 8 = 48$

$6 \times 9 = 54$

and so on...

What are the first 6 multiples of 6? **6, 12, 18, 24, 30, and 36**



1. What are the first 4 multiples of 9? \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_

2. Circle the numbers that are multiples of 7.  
Cross out the numbers that are not multiples of 7.

1            7            14            17            21            27            35

3. Circle the numbers that are multiples of 8.  
Cross out the numbers that are not multiples of 8.

38            40            45            49            64            72            81

4. Are multiples of 4 always even? Explain.

---

---

5. Are multiples of 3 always odd? Explain.

---

---

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

## Squares and Square Roots

Cut out the squares and square roots at the bottom of the page. Glue them into the box next to their equivalent number.

5	
7	
36	
8	
3	

81	
25	
9	
4	
11	

10	
64	
6	
49	
12	

$9^2$	$\sqrt{49}$	$6^2$	$\sqrt{16}$	$\sqrt{64}$	$5^2$	$\sqrt{81}$	$\sqrt{100}$
$\sqrt{144}$	$\sqrt{9}$	$\sqrt{25}$	$8^2$	$\sqrt{36}$	$\sqrt{121}$	$7^2$	

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

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

## Lesson 3.2 Multiplying Decimals

### Multiply.

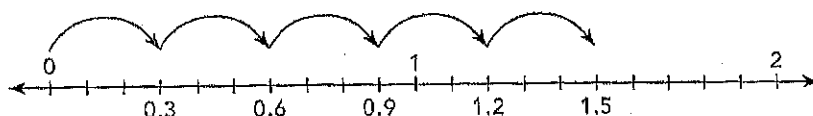
*Example*

$$0.3 \times 5$$

#### **Method 1**

$$0.3 \times 5 = 5 \times 0.3$$

$5 \times 0.3$  means 5 groups of 0.3.



$$\begin{aligned} 5 \times \underline{0.3} &= 5 \times \underline{3} \text{ tenths} \\ &= \underline{15} \text{ tenths} \\ &= \underline{1.5} \end{aligned}$$

From the number line, you can see that  $5 \times 0.3 = 0.3 + 0.3 + 0.3 + 0.3 + 0.3$

#### **Method 2**

Step 1

$$\begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array}$$

Step 1: Ignore the decimal point as you multiply.  
Step 2: Decide where to place the decimal point in the product.



Step 2

$$\begin{array}{r} 0.3 \quad \leftarrow 1 \text{ decimal place} \\ \times 5 \\ \hline 1.5 \quad \leftarrow 1 \text{ decimal place} \end{array}$$





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

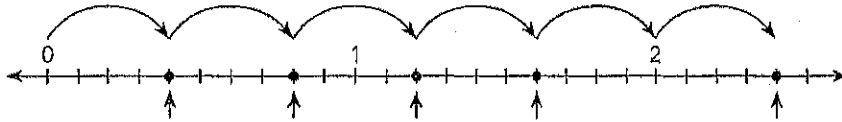
Date: \_\_\_\_\_

1.  $0.4 \times 6$

**Method 1**

$$0.4 \times 6 = 6 \times 0.4$$

$6 \times 0.4$  means \_\_\_\_\_ groups of \_\_\_\_\_.



$$6 \times \underline{\hspace{1cm}} = 6 \times \underline{\hspace{1cm}} \text{ tenths}$$

$$= \underline{\hspace{1cm}} \text{ tenths}$$

$$= \underline{\hspace{1cm}}$$

**Method 2**

$$\begin{array}{r} \text{Step 1} \quad 4 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{Step 2} \quad 0.4 \\ \times \quad 6 \\ \hline \end{array}$$

2.  $0.7 \times 5$

3.  $8 \times 0.3$

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

## Reciprocals

Find the reciprocals of the fractions and mixed numbers and write them in the space provided.

1.  $2\frac{5}{12}$  \_\_\_\_\_

2.  $\frac{37}{74}$  \_\_\_\_\_

3.  $\frac{17}{41}$  \_\_\_\_\_

4.  $3\frac{4}{13}$  \_\_\_\_\_

5.  $\frac{12}{19}$  \_\_\_\_\_

6. 62 \_\_\_\_\_

7.  $\frac{7}{55}$  \_\_\_\_\_

8.  $\frac{5}{36}$  \_\_\_\_\_

9.  $\frac{8}{9}$  \_\_\_\_\_

10.  $5\frac{7}{8}$  \_\_\_\_\_

11.  $7\frac{3}{11}$  \_\_\_\_\_

12.  $\frac{42}{93}$  \_\_\_\_\_

13. 22 \_\_\_\_\_

14.  $\frac{18}{25}$  \_\_\_\_\_

15.  $4\frac{5}{6}$  \_\_\_\_\_

16.  $\frac{67}{70}$  \_\_\_\_\_

17.  $\frac{22}{49}$  \_\_\_\_\_

18.  $\frac{17}{32}$  \_\_\_\_\_

19.  $\frac{3}{97}$  \_\_\_\_\_

20.  $4\frac{7}{20}$  \_\_\_\_\_

21.  $\frac{27}{56}$  \_\_\_\_\_

22. 35 \_\_\_\_\_

23.  $\frac{15}{46}$  \_\_\_\_\_

24.  $9\frac{3}{4}$  \_\_\_\_\_

25.  $3\frac{11}{14}$  \_\_\_\_\_

26.  $\frac{60}{61}$  \_\_\_\_\_

27.  $2\frac{15}{24}$  \_\_\_\_\_

28.  $5\frac{7}{15}$  \_\_\_\_\_

29. 106 \_\_\_\_\_

30.  $\frac{64}{87}$  \_\_\_\_\_

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

## Multiplying Fractions

**Step 1:** Multiply the numerators.

$$\frac{3}{5} \times \frac{2}{3} = \frac{6}{15}$$

.....

**Step 2:** Multiply the denominators.

$$\frac{3}{5} \times \frac{2}{3} = \frac{6}{15}$$

.....

**Step 3:** Simplify your answer if possible.

$$\frac{3}{5} \times \frac{2}{3} = \frac{6}{15} = \frac{2}{5}$$

a.  $\frac{7}{8} \times \frac{4}{9}$

b.  $\frac{4}{5} \times \frac{1}{4}$

c.  $\frac{2}{9} \times \frac{1}{7}$

d.  $5 \times \frac{7}{8}$

e.  $\frac{2}{3} \times \frac{5}{8}$

f.  $\frac{3}{4} \times 8$

g.  $\frac{2}{3} \times 9$

h.  $\frac{3}{7} \times \frac{5}{9}$

i.  $\frac{9}{10} \times \frac{5}{18}$

j.  $\frac{2}{3} \times \frac{6}{7} \times \frac{3}{5}$

k.  $7 \times \frac{2}{3} \times \frac{3}{4}$

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

## Improper Fractions & Mixed Numbers

Write each mixed number as an improper fraction

a.  $2 \frac{1}{4} =$

b.  $8 \frac{3}{8} =$

c.  $2 \frac{5}{6} =$

d.  $4 \frac{1}{2} =$

e.  $5 \frac{1}{3} =$

f.  $10 \frac{7}{12} =$

g.  $9 \frac{1}{4} =$

h.  $6 \frac{5}{6} =$

i.  $7 \frac{5}{6} =$

j.  $10 \frac{3}{7} =$

k.  $11 \frac{1}{3} =$

l.  $20 \frac{1}{2} =$

Write each improper fraction as a mixed number.

m.  $\frac{7}{5} =$

n.  $\frac{9}{4} =$

o.  $\frac{5}{3} =$

p.  $\frac{22}{9} =$

q.  $\frac{13}{7} =$

r.  $\frac{9}{2} =$

s.  $\frac{17}{9} =$

t.  $\frac{7}{3} =$

u.  $\frac{17}{7} =$

v.  $\frac{10}{3} =$



- w. Mrs. Jones bakes pies. She always cuts each pie into 8 slices. There are 13 slices left on the counter. Write the number of pies on the counter as a mixed number and as an improper fraction.
- \_\_\_\_\_

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

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

CHAPTER

**4**

**Ratio**

**Lesson 4.1 Comparing Two Quantities**

**Complete.**

*Example*

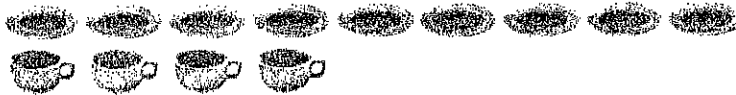


7 : 5 and 5 : 7 are called **ratios**. 5 and 7 are the **terms** of these ratios.

The ratio of the number of apples to the number of pears is 7 : 5.

The ratio of the number of pears to the number of apples is 5 : 7.

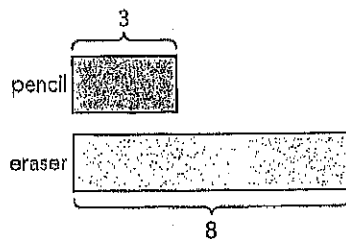
1.



The ratio of the number of saucers to the number of cups is \_\_\_\_\_ : \_\_\_\_\_.

The ratio of the number of cups to the number of saucers is \_\_\_\_\_ : \_\_\_\_\_.

2.



The ratio of the number of pencils to the number of erasers is \_\_\_\_\_ : \_\_\_\_\_.

The ratio of the number of erasers to the number of pencils is \_\_\_\_\_ : \_\_\_\_\_.

