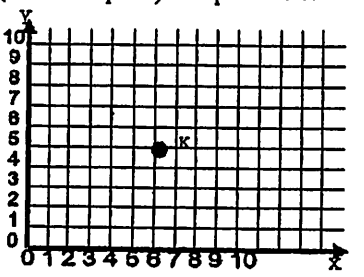
Saturday 3/28

5.G.12

Identify and Plot Points in the First Quadrants

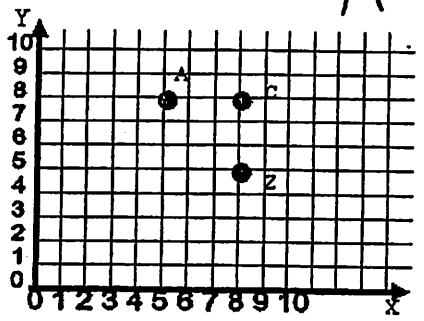
1. What are the coordinates (ordered pair) for point K?



A (5,6) (B) (6,5)
C (6,6) D (7,5)

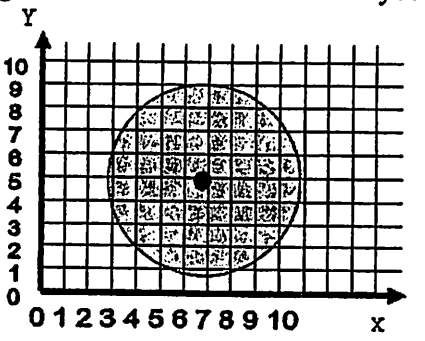
2. Which point is plotted at (5,8)?

A

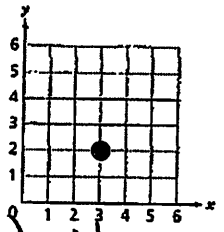


3. The shaded circle shows a bull's eye in the center. What coordinates give the location of the bull's eye?

Closest to (7,5)



4. Look at the graph below. Did Matthew plot point (2,3) correctly?

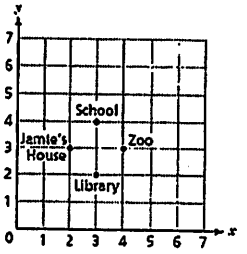


Answer: (3,2) No

Explain how you know you're right:

He plotted (y, x) instead of (x, y)

5. Jamie created a map for his friends. Each point on the map represents a different location. What coordinates represent Jamie's house?



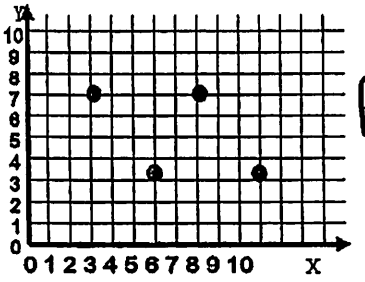
(2,3)

Saturday 3/28

5.G.13

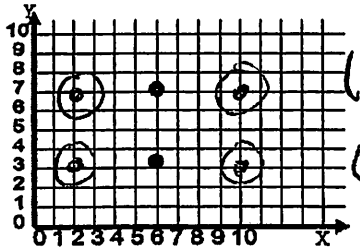
Plot Points to Form Basic Geometric Shapes

1. Name the figure when the points are connected?



Parallelogram

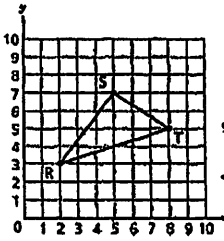
2. Two vertices of a square are located on the coordinate grid. Give all possible answers for the other two vertices of the square.



(2,7) (10,7)

(2,3) (10,3)

3. A triangle is plotted on the coordinate plane below. Which coordinates represent, in order, the locations of point R, point S, and point T?

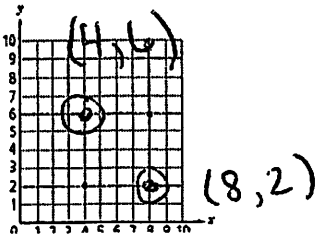


R: (2,3)

S: (5,7)

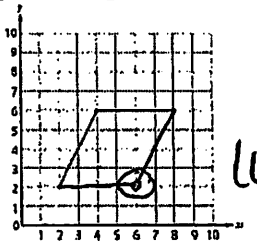
T: (8,5)

4. Carlos plots two points on the grid below. He wants to plot two more points and then connect all four points to form a square. Which two points should Carlos plot to form a square?



(4,6) (8,2)

5. Michael plots three points on the grid below and connects the points. What coordinates should Michael plot next if he wants to draw a parallelogram?



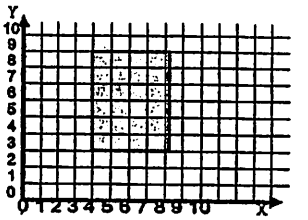
(6,2)

Sunday 3/29

5.G.14

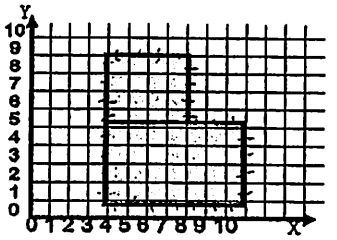
Calculate Perimeter of Basic Geometric Shapes Drawn on a Coordinate Grid

1. What is the perimeter of the rectangle plotted on the grid?



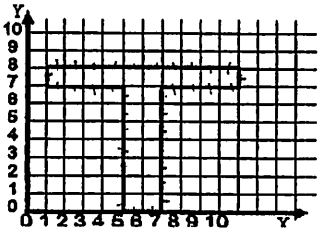
A 24 units
B 20 units
C 16 units
D 10 units

2. Two rectangles were combined to make the figure shown on the grid. What is the perimeter of the figure?



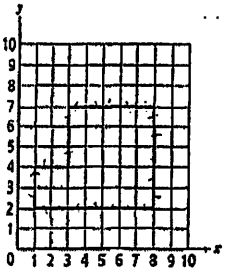
30 units

3. The T-shape shown was made of two different rectangles. Determine the perimeter of the shape.



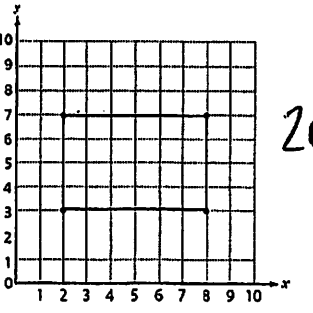
36 units

4. A diagram of a classroom floor at Hilldale Middle School is drawn on the grid below. What is the perimeter of the classroom?



24 units

5. What is the perimeter, in units, of the rectangular table top?



20 units

Sunday 3/29

6.A.01

Translate two-step verbal expressions into algebraic expressions

1. Write an expression that shows the sum of twice a number and 5.

Expression: $2x + 5$

2. Gabe invited 4 girls and 7 boys to a party. Each of Gabe's guests received a certain number of candy bars, c . Which expression represents the total number of candy bars given to Gabe's guests?

(A) 11 c B 28 c

C 4c + 7 D 4c × 7c

3. The number of restaurants on Main Street is 3 less than 4 times the number of restaurants, *r*, on Kline Street. Which expression can be used to determine the number of restaurants on Main Street?

A 7*r* B 12*r*

C 3 - 4*r* (D) 4*r* - 3

4. On Friday, Eli saw a certain number of fighter jets, *j*. On Saturday, he saw 3 more than double the number of fighter jets he saw on Friday.

Write an expression for the number of fighter jets Eli saw on Saturday.

Expression: $3 = 2j + 3$

5. Sarah collects silly bands and keeps them in plastic bags. She had 9 plastic bags with a certain number of bands, *b*, in each envelope. She sells 3 of the bags. Which expression represents the number of bands Sarah has left?

A 9*b* - 3 B (9 + 3)*b*

(C) 9*b* – 3*b* D 9*b* - *s* - 3

Monday 3/30

6.A.02

Use Substitution to Evaluate Algebraic Expressions

1. What is the value of the expression $6m + 3^3$ when m equals 7?

Show your work. $6 \cdot 7 + 3^3$

$6 \cdot 7 + 27$

$42 + 27$

69

Answer 69

2. What is the value of the expression below when $a = 2$ and $b = 6$?

$3a^3 + 5b^2$

Show your work. $3 \cdot 2^3 + 5 \cdot 6^2$

$3 \cdot 8 + 5 \cdot 36$

$24 + 180$

204

Answer 204

3. What is the value of the following expression when r = 5 and s = 3 ?

$r^2 + s^3$

A 19
B 34
C 52
D 85

$5^2 + 3^3$

$25 + 27$

52

4. Mr. Cohen wrote the expression below for his 3 cousins to use to find his age.

$n^2 \times 7 - 3$

If n represents the number of cousins, what is Mr. Cohen's age?

A 12 B 18
C 36 D 60

$n^2 \times 7 - 3$

$3^2 \times 7 - 3$

$9 \times 7 - 3$

$63 - 3$

60

5. The expression below represents the total cost in dollars, including shipping, for a certain number of music CDs, m .

$8m + 5$

Based on the expression above, what is the total cost for 4 music CDs?

A $13 B $17 C $32 D $37

$8(4) + 5$

$32 + 5$

37

Monday 3/30

6.A.03

Translate two-step verbal equations into algebraic equations

1. Write the algebraic equation for six times a number, minus twelve, equals nineteen.

Equation: $6x - 12 = 19$

2. What is the algebraic equation for nine times a number is five less than eighty-six?

(A) $9y = 86-5$ $9x = 86-5$

B $9y - 5 = 86$

C $9(y-5) = 86$

D $9y = 5 - 86$

3. Write the algebraic equation for six less than twice a number is twelve.

$2x - 6 = 12$

Equation: $2x-6=12$

4. Which algebraic equation below represents the sum of half a number and twenty equals one hundred?

A $b+10=100$ $\frac{1}{2}x + 20 = 100$

(B) $\frac{1}{2}b+20=100$

C $\frac{1}{2}b+10=100$

D $\frac{1}{2}b-20=100$

5. What is the algebraic equation for two more than the quotient of a number and ten is 13?

A $a \div 2 + 10 = 13$ $\frac{a}{10} + 2 = 13$

B $a \div 2 + 10 = 30$

(C) $a \div 10 + 2 = 13$

D $a \div 10 + 2 = 30$

Tuesday 3/31

6.A.04

Solve and Explain Two-step Equations Involving Whole Numbers and Inverse Operations

1. Solve this equation.

[redacted] $n + 2.5 = 13$

Show all work

$-2.5 \quad -2.5$

10.5

Answer: _____

Explain your steps:

2. Solve the equation below for x.

[redacted] $1.93 + x = 7$

Show your work.

$-1.93 \quad -1.93$

5.07

Answer: x = 5.07

3. What value of x makes the equation below true?

[redacted] $\frac{2}{3} \cdot x = \frac{5}{6} \div \frac{2}{3}$

Show your work.

$\div \frac{2}{3}$

$\frac{5}{6} \cdot \frac{3}{2}$

$x = \frac{5}{4} = 1\frac{1}{4}$

Answer: x = $1\frac{1}{4}$

4. What is the value of w in the equation below?

[redacted] $4m = 9$

Show your work.

$\div 4 \quad \div 4$

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

Answer: w = $2\frac{1}{4}$

5. Solve the equation below for x.

[redacted] $x \cdot \frac{1}{2} = 10 \div \frac{1}{2}$

Show your work.

$\div \frac{1}{2}$

$\frac{10}{1} \cdot \frac{2}{1}$

$x = 20$

Answer: x = 20

Explain your steps:

Tuesday 3/31

6.A.05

Solve Simple Proportions within Context

1. Mary picks 15 flowers from her garden. If 3 out of 5 of these flowers are yellow, how many yellow flowers does Mary pick?

A 3
B 9
C 13
D 25

$\frac{3 \text{ yellow}}{5 \text{ total}} = \frac{9 \text{ yellow}}{15 \text{ total}}$ (×3)

2. Derek has 12 shirts in his closet. If 2 out of every 3 of these shirts are striped, how many striped shirts does Derek have in his closet?

A 2
B 8
C 11
D 18

$\frac{2 \text{ striped}}{3 \text{ total}} = \frac{8 \text{ striped}}{12 \text{ total}}$ (×4)

3. An art teacher mixes 20 ounces of yellow paint with 8 ounces of red paint. How many ounces of yellow paint would she need to mix with 18 ounces of red paint to maintain the same proportion?

A 3
B 10
C 40
D 45

$\frac{8 \text{ red}}{20 \text{ yellow}} = \frac{18 \text{ red}}{x \text{ yellow}}$

$\frac{8x}{8} = \frac{360}{8}$

$x = 45$

4. A car uses 9 gallons of gasoline to go 162 miles. How many gallons of gasoline will the same car use to travel 216 miles?

Show all work

$\frac{162 \text{ mi.}}{9 \text{ gal.}} = \frac{216 \text{ mi.}}{x \text{ gal.}}$

$\frac{162x}{162} = \frac{1944}{162}$

$x = 12$

Answer: 12 gallons

5. Two thirds of the students in the middle school have brown hair. Write and solve a proportion to find how many students have brown hair if there are 900 students in the middle school.

Show all work

$\frac{2 \text{ brown hair}}{3 \text{ students}} = \frac{x}{900 \text{ students}}$ (×300)

Answer: 600 brown hair students

Wednesday 4/1

6.N.11

Read, Write and Identify Percents of a Whole (0% to 100%)

1. Lani has learned 21 of the 84 songs in her piano playbook. What percent of the total number of songs in the playbook has Lani learned?

A 75% B 63%

C 25% D 21%

$\frac{21}{84} = \frac{x}{100}$

$\frac{84x}{84} = \frac{2100}{84}$

$x = 25$

2. Tyrone saved $24 of the $60 he earned mowing lawns. What percent of his earnings did Tyrone save?

Show your work.

$\frac{24}{60} = \frac{x}{100}$

$\frac{60x}{60} = \frac{2400}{60}$

$x = 40$

Answer: 40 %

3. Mr. Jenkins wants to distribute 40 fliers. He has distributed 30 fliers so far. What percent of the total number of fliers has Mr. Jenkins distributed?

A 60% B 70%

C 75% D 80%

$\frac{30}{40} = \frac{x}{100}$

$\frac{3}{4} = \frac{75}{100}$ (×25)

4. In Ms. Fletcher's class, 7 of the 20 students attend an after school art program. What percent of the students attend the after school art program?

Show your work.

$\frac{7}{20} = \frac{35}{100}$ (×5)

Answer: 35 %

5. In a dentist office survey 15 out of 100 patients prefer bubblegum toothpaste over mint toothpaste. What percent of patients prefer bubblegum toothpaste over mint?

Show your work.

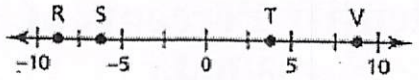
Answer: 15 %

Wednesday 4/1

6.N.14

Locate Rational Numbers on a Number Line

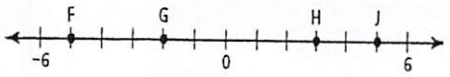
1. Which point on the number line below represents a number that is less than -2.5 but greater than -7.5?



A point R B point S

C point T D point V

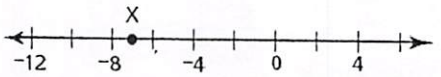
2. Which point on the number line is greater than –4 but less than 0 ?



A F B G

C H D J

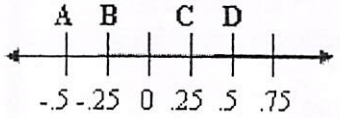
3. What number is represented by point X on the number line?



A -6 B -7

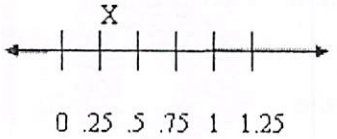
C -9 D -10

4. Which letter is shown on the number line at –0.5?



Answer: A

5. Which number does X represent on the number line?



A 0.028 B 0.19

B 28% D $\frac{7}{8}$

Thursday 4/2

6.N.15 Order Rational Numbers Positive and Negative

1. The table below shows the points earned by five teams in a mathematics game. What is the list of the points in order from **greatest** to **least**?

MATHEMATICS GAME

Team	Number of Points
Team A	$9\frac{1}{2}$
Team B	$8\frac{3}{4}$
Team C	$9\frac{1}{4}$
Team D	$8\frac{1}{4}$
Team E	$8\frac{1}{2}$

G $9\frac{1}{2}$ A
$9\frac{1}{4}$ C
$8\frac{3}{4}$ B
$8\frac{1}{2}$ E
L $8\frac{1}{4}$ D

2. Bobby is sorting some nails by their lengths. The lengths of the nails are 2 1/2 inches, 2 3/4 inches, 3/4 inch, 3 1/2 inches, and 2 1/4 inches. Which list of lengths is in order from shortest to longest ?

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

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

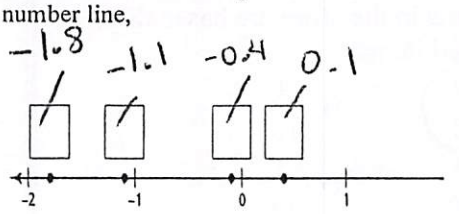
C $\frac{3}{4}$ $2\frac{1}{2}$ $2\frac{1}{4}$ $3\frac{1}{2}$ $2\frac{3}{4}$

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

3. Komiko wants to plot the numbers below on a number line.

-1.8 -0.4 0.1 -1.1

Write the correct number for each point in the boxes above the points on the number line,



4. Which shows the integers in order from greatest to least?

A –4, -5, -7, 3

B 3, -4, -5, -7

C –7, -5, -4, 3

D 3, -7, -5, -4

5. Order the following from **least** to **greatest**.

-8, 80%, $\frac{8}{50}$, 8.6012

↓ ↓

-8 $\frac{4}{5}$ $\frac{4}{25}$

Answer: -8, $\frac{8}{50}$, 80%, 8.6012

Thursday 4/2

6.N.16

Add and Subtract Fractions with Unlike Denominators

Common Denominator = 6

1. Mica and Denise are reading the same novel. Mica has read $\frac{1}{2}$ of the novel, and Denise has read $\frac{1}{3}$ of the novel. How much more of the novel has Mica read than Denise?

A $\frac{1}{6}$ B $\frac{2}{5}$ C $\frac{3}{5}$ D $\frac{5}{6}$

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

$\frac{3}{6} - \frac{2}{6} = \frac{1}{6}$

Common Denominator: 30

2. At a sporting goods store, $\frac{3}{10}$ of all the items are baseball items and $\frac{1}{3}$ of all the items are football items. What fraction of the total number of items in the store are baseball or football items?

A $\frac{19}{30}$ B $\frac{4}{13}$ C $\frac{4}{30}$ D $\frac{3}{13}$

$\frac{1}{10} + \frac{1}{3}$

$\frac{3}{30} + \frac{10}{30}$

$\frac{19}{30}$

3. Ms. Brown asked her students to simplify the expression below. What is the simplified version of Ms. Brown's expression?

Common Denom. 12

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

A $\frac{2}{7}$ B $\frac{3}{7}$ C $\frac{3}{12}$ D $\frac{11}{12}$

Answer: _____

$\frac{8}{12} + \frac{3}{12}$

$\frac{11}{12}$

Common Denominator: 24

4. A sixth-grade class completed a survey about favorite foods. Of the students in the class, 2/6 chose hamburgers, and 3/8 chose pizza. What fraction of the class chose either hamburgers or pizza as the favorite food?

A $\frac{1}{24}$ B $\frac{6}{48}$ C $\frac{5}{14}$ D $\frac{17}{24}$

$\frac{1}{3} + \frac{3}{8}$

$\frac{8}{24} + \frac{9}{24}$

$\frac{17}{24}$

5. Rachael had $\frac{7}{8}$ of a pepperoni pizza left over. After school, she decided to eat $\frac{2}{3}$ of the pizza. How much was left?

Show all work

Answer: $\frac{5}{24}$ of a pizza

$\frac{7}{8} - \frac{2}{3}$

$\frac{21}{24} - \frac{16}{24}$

$\frac{5}{24}$

Friday 4/3

6.N.17 (A)

Multiply Fractions with Unlike Denominators

1. Multiply $4\frac{3}{7} \times 3\frac{2}{5}$. Express your answer in simplest form.

$\frac{31}{7} \cdot \frac{17}{5} = \frac{527}{35}$

$15\frac{2}{35}$

Show all work

Answer: $15\frac{2}{35}$

2. What is the product of $2\frac{1}{4}$ and $5\frac{1}{6}$? Express your answer in simplest form

$\frac{9}{4} \cdot \frac{31}{6_2} = \frac{93}{8}$

Show all work

Answer: $11\frac{5}{8}$

3. Robert drives $2\frac{1}{3}$ miles to work every day. If he works 5 days, how many miles will he drive? Express your answer in simplest form.

Show all work $\frac{5}{1} \cdot \frac{7}{3} = \frac{35}{3}$

Answer: $11\frac{2}{3}$ miles

4. Express the product in simplest form: $2\frac{1}{3} \times 4\frac{1}{8}$

$\frac{7}{3} \cdot \frac{33}{8}$

Show all work

$\frac{77}{8}$

Answer: $9\frac{5}{8}$

5. Solve for x. $x = \frac{18}{5} \cdot \frac{14}{4} \cdot \frac{126}{10}$

Express your answer in simplest f

Show all work $12\frac{6}{10}$

Answer: $12\frac{3}{5}$

Friday 4/3

6.N.17 (B)

Divide Fractions with Unlike Denominators

* Multiply

1. 36 children showed up for Max's birthday party but there were only enough cupcakes for $\frac{2}{3}$ of the children. How many children received cupcakes?

$\frac{36}{1} \cdot \frac{2}{3} = 24$

Show all work

Answer: 24 kids

2. What is $\frac{1}{8} \div 10$ in simplest form?

$\frac{1}{8} \cdot \frac{1}{10} = \frac{1}{80}$

A $\frac{80}{1}$ B $\frac{1}{80}$

C $\frac{65}{1}$ D $\frac{1}{65}$

3. There were $\frac{3}{4}$ of a pound of grapes left after the picnic. Cody wanted to split them evenly among his three friends. How many grapes will each friend get? Express your answer in simplest form.

$\frac{3}{4} \div 3$

$\frac{3}{4} \cdot \frac{1}{3}$

$\frac{1}{4}$

Show all work

Answer: $\frac{1}{4}$ of a pound

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

$\frac{8}{1} \cdot \frac{23}{5}$

$\frac{8}{1} \cdot \frac{5}{23}$

$\frac{140}{23}$

$6\frac{2}{23}$

4. Bill wants to make steps to his back porch. He has a board of wood that is 28 feet long. He wants each step to be $4\frac{3}{5}$ feet long. How many steps can Bill make?

Show all work

Answer: 6 steps

5. Gino has a stick of pepperoni that is $26\frac{1}{2}$ inches long. He wants to cut $\frac{1}{2}$-inch pieces to put on his large pizza. How many pieces can Gino get from that stick?

$26\frac{1}{2} \div \frac{1}{2}$

A 50 B 51

C 52 D 53

$\frac{53}{1} \cdot \frac{2}{1} = 53$

Saturday 4/4

6.N.18

Add, Subtract, Multiply, and Divide Mixed Numbers with Unlike Denominators

* Multiply

1. Cindy wants to make $2\frac{1}{2}$ orders of tacos. Each order needs $3\frac{1}{3}$ ounces of cheese. How many ounces of cheese will she need? Express your answer in simplest form.

Show all work

Answer: $8\frac{1}{3}$ ounces of cheese

$\frac{5}{2} \cdot \frac{10}{3}$

$\frac{25}{3}$

$8\frac{1}{3}$

* Multiply

2. Jim spends $3\frac{1}{2}$ days a month away from home. If he did this for $6\frac{1}{2}$ months. How many days would Jim be away from home? Express your answer in simplest form.

Show all work

Answer: $22\frac{3}{4}$ days

$\frac{7}{2} \cdot \frac{13}{2}$

$\frac{91}{4}$

$22\frac{3}{4}$

* Subtract

3. Kim is baking a batch of cookies. She needs $2\frac{3}{4}$ cups of sugar. If she only has $1\frac{1}{3}$ cups, how much more sugar does Kim need? Write your answer in simplest form.

CD: 12

Show all work

Answer: $1\frac{5}{12}$ more cups

$\frac{11}{4} - \frac{4}{3}$

$\frac{33}{12} - \frac{16}{12}$

$\frac{17}{12} = 1\frac{5}{12}$

* Subtraction

4. Jorge is making a videotape of Jorge Jr.'s baseball games. The cassette holds $9\frac{1}{2}$ hours of footage. If he has used $4\frac{2}{3}$ hours up, how much time does Jorge have left? Write your answer in simplest form.

CD: 6

Show all work

Answer: $4\frac{5}{6}$ hours left

$\frac{19}{2} - \frac{14}{3}$

$\frac{57}{6} - \frac{28}{6}$

$\frac{29}{6}$

$4\frac{5}{6}$

* Add

5. Find the sum of $2\frac{2}{7}$ and $6\frac{3}{14}$ and reduce to lowest terms:

CD: 14

Show all work

Answer: $8\frac{1}{2}$

$\frac{16}{7} + \frac{87}{14}$

$\frac{32}{14} + \frac{87}{14}$

$\frac{119}{14}$

$8\frac{7}{14}$

Saturday 4/4

6.N.19 Identify the Multiplicative Inverse (Reciprocal) of a Number

1. Paulie multiplies two numbers whose product is 1. If one of the numbers is 2, what is the other number?

A $\frac{2}{1}$ B $\frac{1}{2}$

C 1 D 0

2. What value for n makes the equation true?

$3 \times n = 1$

A -3 B $\frac{1}{3}$

C $\frac{2}{3}$ D 2

3. Which is the multiplicative inverse of $2\frac{+1}{\times 3}$. $\frac{7}{3} \rightarrow \frac{3}{7}$ reciprocal

A $2\frac{3}{1}$ B $\frac{7}{3}$

C $\frac{5}{1}$ D $\frac{3}{7}$

4. What value for n makes the equation true?

$5\frac{+3}{\times 7} \times n = 1$ $\frac{38}{7} \times n = 1$

$n = \frac{7}{38}$

Show all work

Answer: $\frac{7}{38}$

5. What value for n makes the equation true?

$\frac{4}{12} \times n = 1$ $\frac{12}{4} = \frac{3}{1}$

A $\frac{4}{12}$ B $\frac{12}{1}$

C $\frac{1}{1}$ D $\frac{3}{1}$

Sunday 4/5

6.N.21

Find Multiple Representations of Rational Numbers

1. Jenny picked 25 roses. She gave away 10 roses. What percent of the roses did Jenny give away?

Show your work. $\frac{10}{25} \overset{\times 4}{=} \frac{40}{100}$ (×4)

Answer 40 %

2. In a sixth-grade music class, 1/5 of the class wants to play the drums. Which decimal is equivalent to 1/5?

A 0.02 B 0.15

C 0.2 D 1.5

3. At a gymnastics competition, 3/10 of the gymnasts won a ribbon. What percent of the gymnasts won a ribbon?

A 3% B 30%

C 33% D $33\frac{1}{3}$%

4. What is the decimal equivalent of $\frac{9}{20}$? $\overset{\times 5}{=} \frac{45}{100} = 0.45$ (×5)

Show all work

Answer: 0.45

5. Convert 4% to a decimal and fraction.

Show all work

$\frac{4}{100} = 0.04$ $\frac{4}{100} \div 4 = \frac{1}{25}$

Answer: 0.04 and $\frac{1}{25}$