Below are sample test questions at the 8th grade level to prepare you for the UPCT Boot Camp. We have also included websites that may be helpful to you.

UPCT PREPARATION RESOURCES

Basic Skill Set

THE LANGUAGE OF MATHEMATICS

In order to solve a mathematical problem it is essential to know the mathematical meaning of the words used. There are many expressions having the same meaning in mathematics. These expressions may indicate a relationship between quantities, or an operation (addition, subtraction, multiplication, division) to be performed.

Equality

The following expressions all indicate that two quantities are equal (=):

is equal to
is the same as
the result is
yields
gives

Adding

The following expressions all indicate that the numbers A and B are to be added:

A + B
The sum of A and B
The total of A and B
A added to B
A increased by B
A more than B
A greater than B

2 + 3
The sum of 2 and 3
The total of 2 and 3
2 added to 3
2 increased by 3
2 more than 3
2 greater than 3

Example:

\[
\begin{array}{ll}
1 \frac{3}{4} & 1 \frac{6}{8} \\
2 \frac{3}{8} & 2 \frac{3}{8} \\
3 \frac{9}{8} & = 4 \frac{1}{8}
\end{array}
\]
Subtraction

The following expressions all indicate that the number B is to be subtracted from the number A:

\[
\begin{align*}
A - B & \quad 10 - 3 \\
A \text{ minus } B & \quad 10 \text{ minus } 3 \\
A \text{ less } B & \quad 10 \text{ less } 3 \\
\text{The difference between } A \text{ and } B & \quad \text{The difference between 10 and 3} \\
\text{From } A \text{ subtract } B & \quad \text{From } 10 \text{ subtract } 3 \\
A \text{ take away } B & \quad 10 \text{ take away } 3 \\
A \text{ decreased by } B & \quad 10 \text{ decreased by } 3 \\
A \text{ diminished by } B & \quad 10 \text{ diminished by } 3 \\
B \text{ is subtracted from } A & \quad 3 \text{ is subtracted from } 10 \\
B \text{ less than } A & \quad 3 \text{ less than } 10
\end{align*}
\]

Example:

\[
\begin{align*}
\frac{1}{4} - \frac{1}{8} - \frac{1}{12} & = \frac{11}{24} \\
1/4 & = 2/8 \quad \text{The numerator and denominator of} \\
-1/8 & = 1/8 \quad \text{a fraction may be changed by} \\
= 1/8 & \quad \text{multiplying both by the same number} \\
1/8 & = 3/24 \quad \text{without affecting the value of the fraction} \\
-1/12 & = 2/24 \\
& = 1/24
\end{align*}
\]

Multiplication

If the numbers A and B are to be multiplied (A \times B), the following expressions may be used:

\[
\begin{align*}
A \times B & \quad 2 \times 3 \\
A \text{ multiplied by } B & \quad 2 \text{ multiplied by } 3 \\
The \text{ product of } A \text{ and } B & \quad \text{The product of } 2 \text{ and } 3
\end{align*}
\]

The parts of a multiplication problem are indicated in the example below:

\[
15 \text{ (multiplicand)} \\
x 10 \text{ (multiplier)} \\
150 \text{ (product)}
\]
Division Decimals

Division of the numbers A and B (in the order A/B) may be indicated in the following ways:

\[
\begin{align*}
A/B & \quad 12/2 \\
A \text{ divided by } B & \quad 14 \text{ divided by } 2 \\
The \text{ quotient of } A \text{ and } B & \quad \text{The quotient of } 12 \text{ and } 2
\end{align*}
\]

The parts of a division problem are indicated in the example below:

\[
\begin{align*}
36 \text{ (dividend)} & \\
+ 10 \text{ (divisor)} & \\
35 & \\
_1 \text{ (remainder)} & \\
5 \, \underline{1/7} \text{ (quotient)} &
\end{align*}
\]

Factors and Divisor

The relationship \(A \times B = C\), for any whole numbers \(A\), \(B\), and \(C\), may be expressed:

\[
\begin{align*}
A \times B = C & \quad 2 \times 3 = 6 \\
A \text{ and } B \text{ are factors of } C & \quad \text{2 and 3 are factors of } 6 \\
A \text{ and } B \text{ are divisors of } C & \quad \text{2 and 3 are divisors of } 6 \\
C \text{ is divisible by } A \text{ and by } B & \quad \text{6 is divisible by } 2 \text{ and } 3 \\
C \text{ is a multiple of } A \text{ and of } B & \quad \text{6 is a multiple of } 2 \text{ and of } 3
\end{align*}
\]

Fractions

Addition of Fractions
\[
\frac{1}{8} + \frac{1}{12} \div \frac{1}{24} = \frac{1}{4}
\]

Subtraction of Fractions
\[
\frac{1}{4} - \frac{1}{8} - \frac{1}{12} = \frac{1}{24}
\]

Multiplication of Fractions
\[
\frac{2}{3} \times \frac{2}{4} = \frac{4}{12} = \frac{1}{3}
\]

Division of Fractions
\[
\frac{2}{3} \div \frac{2}{4} = \frac{2}{3} \times \frac{4}{2} = \frac{8}{6} = 1 \, \underline{1/3}
\]

Division Decimals
\[
1.2 \div .3 = 4 \\
.3)1.2 = \\
\text{Move the decimal point one place to the right} \\
3)12 = 4
\]

Page 3
Division Fractions

\[ \frac{1}{2} / \frac{1}{3} = 1 \frac{1}{2} \]

Converting Fractions to Decimals:
Example:
\[ \frac{1}{3}/32 = 1.09375 \]
\[ 3/100 = 0.03 \]

Change Fraction to a Percent:
Example:
Change \( \frac{5}{8} \) to a percent
\[ \frac{5}{8} = 62.5\% \]

Reading Comprehension
It is expected that you are proficient at the minimum 8th Grade Level

Basic Electricity
Fundamentals of Series Circuits
Fundamentals of Parallel Circuits
Ohms Law: \( E = I \times R \)
Watts Law: \( P = I \times E \)

Experience is not required as we will provide the necessary training to help you become competent in basic electricity.

Hayden 1-7 (In-House Program)
Seven volumes designed specifically to teach electricity.
The series is logically organized to fit the learning process.

Free Math Websites:
HelpWithMath.com
Homeworksimplified.com
Khanacademy.org
Math-Aids.com
MathMadeEasy.com
Mathplayground.com/mathvideos.html
Quizlet.com
Softschools.com
Webmath.com
1. Find the sum:
   37.03, 11.5627, and 3.4005

2. Subtract 4.64 from 7

3. Find the product: 2.7 and 16.9

4. What is 19.6 divided by 3.2 carried out to three decimal places?

5. Add: 2/6 and 3/12

6. Subtract: 5 3/16 and 2 3/4

7. Write 210% as a decimal

8. What is 250% of 800?

9. Find the area in square inches of a square that measures 4 feet x 4 feet?

10. 3 (6+3)- 12 =

11. If three hoses of equal length connected together reach 24 feet. How many hoses
    would you need to reach 64 feet?

12. 5/16 divided by 3/96 equals:

13. 7/8 multiplied by 2/9 equals:

14. If 4 feet 4 inches were cut from a 12 feet 11 inch board, how much of the
    original board remains?
1. Find the sum: 37.03, 11.5627, and 3.4005 51.9932
2. Subtract 4.64 from 7 2.36
3. Find the product: 2.7 and 16.9 45.63
4. What is 19.6 divided by 3.2 carried out to three decimal places? 6.125
5. Add: 2/6 and 3/12 7/12
6. Subtract: 5 3/16 and 2 3/4 2 7/16
7. Write 210% as a decimal 2.1
8. What is 250% of 800? 2000
9. Find the area in square inches of a square that measures 4 feet x 4 feet? 2304 sq. in.
10. 3 (6+3) - 12 = 15
11. If three hoses of equal length connected together reach 24 feet. How many hoses would you need to reach 64 feet? 8 hoses
12. 5/16 divided by 3/96 equals 10
13. 7/8 multiplied by 2/9 equals 7/36
14. If 4 feet 4 inches were cut from a 12 feet 11 inch board, how much of the original board remains? 8 ft 7 in
Independent Practice: Multiplicative Comparison

Solve each problem below by identifying the number in one set, and the number in the second set, which is a multiple of the first. Divide the second set by the first set. Go back to the problem to make sure you have answered the question being asked, and that your answer makes sense.

*Sylvia lives 48 miles away from Washington Elementary School. Jessica lives six miles away from the same school. How many times as far from the school does Sylvia live compared to Jessica?*

The number in one set is_____. The number in the second set is_____.

_______ ÷ _______ = _______

*Sylvia lives_____ times as far from the school as Jessica. If you multiply the distance away that Jessica lives by your answer, you should get Sylvia's distance from the school. Is your answer reasonable?*

*Joe drew 32 pictures in his sketch book. He drew four times as many pictures as Kevin. How many pictures did Kevin draw?*

The multiplier is_____. The number in the second set is_____.

_______ ÷ _______ = _______

*Kevin drew_____ pictures. If you multiply the multiplier by your answer, you should get the number of pictures that Joe drew. Is your answer reasonable?*

*Carina drank five sodas at the party on Saturday. Her brother, Oscar, drank two times as many. How many sodas did Oscar drink?*

The number in one set is_____. The multiplier is_____.

_______ × _______ = _______

*Oscar drank_____ sodas. Since you are multiplying a whole number by a whole number, the number of sodas Oscar drank should be more than the number of sodas Carina drank. Is your answer reasonable?*
WFC Sample Test

1. Jana bought a car for $4200 and later sold it for a 30% profit. How much did Jana sell the car for?
   A. $1260
   B. $2940
   C. $5460
   D. $7140

2. Some students attend school 180 of the 365 days in a year. About what part of the year do they attend school?
   A. 18%
   B. 50%
   C. 75%
   D. 180%

3. The weekly sales of a magazine increased from 500,000 to 600,000. By what percentage did the magazine sales increase?
   A. 17%
   B. 20%
   C. 83%
   D. 120%

4. Sally puts $200.00 in a bank account. Each year the account earns 8% simple interest. How much interest will be earned in three years?
   A. $16.00
   B. $24.00
   C. $48.00
   D. $160.00

5. Which fraction is equivalent to \( \frac{5}{6} + \frac{7}{8} \)?
   A. \( \frac{35}{48} \)
   B. \( \frac{6}{7} \)
   C. \( \frac{20}{21} \)
   D. \( \frac{41}{24} \)
<table>
<thead>
<tr>
<th>MEMBERSHIP CATEGORY</th>
<th>DUE UPON JOINING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly</td>
</tr>
<tr>
<td>Adult</td>
<td>$36</td>
</tr>
<tr>
<td>Family*</td>
<td>$51</td>
</tr>
<tr>
<td>Single Parent Family**</td>
<td>$42</td>
</tr>
<tr>
<td>Senior Adult (60+ yrs.)</td>
<td>$30</td>
</tr>
<tr>
<td>Student (18-22 yrs.***</td>
<td>$23</td>
</tr>
</tbody>
</table>

* Includes 2 adults and all children under 18 within the same household
** Includes 1 adult and all children under 18 within the same household
*** Full-time student with ID

1. What is the monthly fee for a family with one adult and two young children living in the same house?
   A. $51.00  
   B. $42.00  
   C. $150.00  
   D. $100.00  

City Health Services announces a new project to educate young people on maintaining good health. CHS will coordinate with local schools to reach out to teens identified as having potential health issues. Teens aged 13 to 18 will receive a complete health appraisal. Training topics will include nutrition, exercise, and healthy weight-loss strategies. The focus will be on self-image, fitness, and food. Participants will identify healthy meals, develop exercise plans, and examine lifestyle choices.

2. What is the purpose of the new project?
   A. To teach young people how to stay healthy  
   B. To identify schools with unhealthy conditions  
   C. To provide nutritious meals for young people  
   D. To interest teenagers in health care careers
From: Gary Tan
To: Building Tenants
Subject: Status of the elevator

As you may know, over the last few months I have received complaints from tenants in many of the offices in our building that the elevator has been malfunctioning. When the elevator first stopped working in June, I called the service manager at the elevator company, who sent out a technician. The technician got the elevator working again, but three weeks later I received more reports of employees getting stuck in the elevator. I again called in a technician for repairs.

After another breakdown two weeks ago I asked for a thorough assessment of the elevator to see why problems are recurring. The company reported that they would need to replace a set of relays in the controller and said they had ordered the parts. Repairs are scheduled for next week.

I am very concerned that your employees, a number of whom are disabled, still cannot use the elevator. I understand that this situation is frustrating for all, and I apologize for the inconvenience to your staff. I do hope the next repair will be the last one.

Gary Tan
Property Manager

3. What is delaying the next repairs on the elevator?
   A. The elevator company has not responded.
   B. The technicians are not available now.
   C. The parts needed are not in stock.
   D. The exact problem needs to be identified.
Handy Hardware store is a small, family-owned business that has managed to survive despite the fact that there are several large chain hardware stores throughout East City. Handy's has a loyal customer base and they do a good business. Many people go to Handy's because of the friendly service and fair prices. It is located not far from a residential area, so many people can walk there. The owner, Ed Handy, knows many of his customers and they like and trust him.

Ed has heard that a large chain store, Home Helper, is opening a new store not far from Handy's, and he is very concerned that he won't be able to compete. His prices are reasonable, but because his store is small, he doesn't have the huge volume of merchandise and the many selections that Home Helper has. His store cannot carry large items such as lumber and appliances, and it doesn't have nursery or gardening supplies either. Ed realizes it is convenient for shoppers to be able to buy many things in one store.

4. According to the situation described, what is Mr. Handy's concern?

A. He may not be able to maintain his prices.
B. He will lose customers to the larger store.
C. His store may not be able to carry many large items.
D. The larger store will buy up all the merchandise.

5. What is the one reason people shop at Handy Hardware?

A. The store has a very large volume of sales.
B. The store sells many products besides hardware.
C. The store has many locations in East City.
D. The store is owned by someone they know.
DIRECTIONS

1. Mark your answers only on the answer sheet. Please do not write in the test booklet. Use scratch paper to do your work if needed. Use number 2 pencil only.

2. Try to answer the question. Choose the one best answer. If you want to change an answer, be sure to erase the first mark completely. If you don’t know an answer, you can go to the next question. Follow the numbers carefully.

3. You may not use a calculator.

Practice 1

\[
\begin{align*}
89 & \quad + \quad 57 \\
A. & \quad 136 \\
B. & \quad 146 \\
C. & \quad 156 \\
D. & \quad 1,316
\end{align*}
\]

Practice 2

Angela Lee

\[
\begin{array}{|c|c|}
\hline
\text{Day} & \text{Hours Worked} \\
\hline
\text{Monday} & 6 \\
\text{Tuesday} & 5 \\
\text{Wednesday} & 4 \\
\text{Thursday} & 7 \\
\text{Friday} & 8 \\
\text{Saturday} & 4 \\
\hline
\end{array}
\]

On what day this week did Angela work the most hours?

A. Monday  
B. Tuesday  
C. Thursday  
D. Friday

PRACTICE QUESTIONS

1 A B C D
2 A B C D

PRACTICE QUESTIONS

1 A B C D
2 A B C D
1. 364
   - 78
   A. 284
   B. 286
   C. 294
   D. 386

2. What time is it?

   A. 10:00
   B. 10:12
   C. 12:00
   D. 12:10
<table>
<thead>
<tr>
<th>SELMORR TIRES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand</strong></td>
</tr>
<tr>
<td>Ariga</td>
</tr>
<tr>
<td>Betrax</td>
</tr>
<tr>
<td>Camwell</td>
</tr>
<tr>
<td>Delron</td>
</tr>
<tr>
<td>Emexar</td>
</tr>
</tbody>
</table>

3. Which of these tires is the most expensive?
   A. Ariga
   B. Betrax
   C. Camwell
   D. Delron

4. Jason paid $6.47 for lunch. What change should he get back from a $10 bill?
   A. $3.53
   B. $3.63
   C. $4.53
   D. $4.63

5. The picture shows how many cups of rice and water to use for cooking brown rice. How many cups of water are needed for 3 cups of rice?
   A. 3
   B. 4
   C. 5
   D. 6
SAMPLE TEST ITEMS
DIRECTIONS

1. Mark your answers only on the answer sheet. Please do not write in the test booklet. Use scratch paper to do your work if needed. Use number 2 pencil only.

2. Try to answer the question. Choose the one best answer. If you want to change an answer, be sure to erase the first mark completely. If you don't know an answer, you can go to the next question. Follow the numbers carefully.

3. You may not use a calculator.

Practice 1

7,649
+5,183

A. 12,722
B. 12,832
C. 13,822
D. 13,932

Practice 2

What is the cost of 3 shirts priced at $8.50 each?

A. $24.15
B. $24.50
C. $25.05
D. $25.50
GET DIRECTIONS

<table>
<thead>
<tr>
<th>Drive straight on 30th Street</th>
<th>2.5 mi.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn right on Davis Street and drive</td>
<td>4.9 mi.</td>
</tr>
<tr>
<td>Turn left on Hill Street and drive</td>
<td>0.7 mi.</td>
</tr>
<tr>
<td>Location on left</td>
<td></td>
</tr>
</tbody>
</table>

1. What is the total length of the trip shown above, in miles?
   A. 6.1  
   B. 6.2  
   C. 7.1  
   D. 8.1

2. Melissa was in a meeting that started at 9:15 a.m. and ended at 10:40 a.m. How long was the meeting?
   A. 1 hour and 25 minutes
   B. 1 hour and 35 minutes
   C. 1 hour and 45 minutes
   D. 1 hour and 55 minutes

3. How much will it cost for bus tickets for 2 adults and 3 children?
   A. $36.00
   B. $40.00
   C. $42.00
   D. $46.00

BUS TOUR PRICES

<table>
<thead>
<tr>
<th>Adult</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>$12.00</td>
<td>$6.00</td>
</tr>
</tbody>
</table>
4. Joe ate 3 pieces of pizza, as shown above. How much of the pizza is left?

   A. \( \frac{3}{5} \)
   
   B. \( \frac{5}{8} \)
   
   C. \( \frac{5}{3} \)
   
   D. \( \frac{8}{5} \)

5. For these 3 months, what was the average number of cars sold per month?

   A. 133
   
   B. 137
   
   C. 140
   
   D. 143
DIRECTIONS

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2. Try to answer the question. Choose the one best answer. If you want to change an answer, be sure to erase the first mark completely. If you don’t know an answer, you can go to the next question. Follow the numbers carefully.

3. You may not use a calculator.

Practice 1

\[
\begin{array}{c}
89 \\
+ 57 \\
\hline
136
\end{array}
\]

A. 136  
B. 146  
C. 156  
D. 1,316

Practice 2

Angela Lee

<table>
<thead>
<tr>
<th>Day</th>
<th>Hours Worked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>6</td>
</tr>
<tr>
<td>Tuesday</td>
<td>5</td>
</tr>
<tr>
<td>Wednesday</td>
<td>4</td>
</tr>
<tr>
<td>Thursday</td>
<td>7</td>
</tr>
<tr>
<td>Friday</td>
<td>8</td>
</tr>
<tr>
<td>Saturday</td>
<td>4</td>
</tr>
</tbody>
</table>

On what day this week did Angela work the most hours?

A. Monday  
B. Tuesday  
C. Thursday  
D. Friday
DIRECTIONS

1. Mark your answers only on the answer sheet. Please do not write in the test booklet. Use scratch paper to do your work if needed. Use number 2 pencil only.

2. Try to answer the question. Choose the one best answer. If you want to change an answer, be sure to erase the first mark completely. If you don't know an answer, you can go to the next question. Follow the numbers carefully.

3. You may not use a calculator.

---

Practice 1

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

A. $1\frac{3}{8}$
B. $1\frac{4}{6}$
C. $2\frac{1}{6}$
D. $2\frac{1}{4}$

---

Practice 2

What is the member price for a shirt selling for $19.50?

A. $17.55
B. $18.55
C. $19.00
D. $19.40
1. \( \frac{1}{5} = \)
   A. 1.5%
   B. 15%
   C. 20%
   D. 50%

2. From these directions, how many tablespoons of mix would you use to make 12 cups of Lemonade?
   A. 2
   B. 6
   C. 12
   D. 24

3. The lunch bill for a group of 6 customers is $54.72. How can they figure each person’s equal share on a calculator?
   A. \( 6 \times 54.72 = \)
   B. \( 6 \div 54.72 = \)
   C. \( 5472 \div 6 = \)
   D. \( 54.72 \div 6 = \)
4. Gary has 12 boxes to put in the warehouse. Each box is 2 feet wide. How can he calculate the total length of the row of boxes?

A. 12 + 2 ft.
B. 2 ft. × 12
C. 2 ft. ÷ 12
D. 12 ÷ 2 ft.

5. A store is giving away $125 in promotional gift cards in 3 different amounts. There are 2 gift cards of $25, 3 gift cards of $10, and 9 gift cards of $5. What are the chances of getting a $25 gift card if you are the first to receive a card?

A. 1/7
B. 1/14
C. 2/25
D. 2/125
SAMPLE TEST ITEMS
DIRECTIONS

1. Mark your answers only on the answer sheet. Please do not write in the test booklet. Use scratch paper to do your work if needed. Use number 2 pencil only.

2. Try to answer the question. Choose the one best answer. If you want to change an answer, be sure to erase the first mark completely. If you don't know an answer, you can go to the next question. Follow the numbers carefully.

3. You may not use a calculator.

Practice 1

<table>
<thead>
<tr>
<th>AUTO SALES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>100</td>
</tr>
<tr>
<td>Aug.</td>
<td>105</td>
</tr>
<tr>
<td>Sept.</td>
<td></td>
</tr>
</tbody>
</table>

By what percentage did sales increase from July to August?

A. 1%
B. 5%
C. 10.5%
D. 105%

Practice 2

The formula for the area of a square is \( A = s^2 \). Which expression is equivalent to \( s^2 \)?

A. \( \frac{s}{2} \)
B. 2s
C. 4s
D. \( s \times s \)
1. \( \frac{18}{8} - 9 \frac{1}{2} = \)

A. \(9 \frac{1}{8}\)

B. \(9 \frac{1}{4}\)

C. \(9 \frac{4}{6}\)

D. \(9\frac{5}{4}\)

2. Warmer air moved into the city last night, raising the temperature from a low of \(-7^\circ\) overnight to a high of \(19^\circ\) this morning.

2. What was the total increase in temperature?

A. \(12^\circ\)

B. \(16^\circ\)

C. \(26^\circ\)

D. \(29^\circ\)

3. Corwell Inc. wants to increase production of a new product. The chart above shows the number of units their current staff produces. At this rate, what is the minimum number of workers they would need to produce at least 200 units daily?

A. \(11\)

B. \(12\)

C. \(13\)

D. \(14\)
4. Cheryl is planning a garden that will be 8x7 feet. She wants it to be raised by 6 inches. How many cubic feet of topsoil will she need to add?

A. 28
B. 54
C. 168
D. 336

5. A shoe store is going out of business. All shoes were marked half off and are now an additional 20% off the sale price. Given a shoe's original price \( P \), which of the following equations shows the final price \( F \)?

A. \( F = 0.20(P/2) \)
B. \( F = 0.30(P) \)
C. \( F = 0.70(P) \)
D. \( F = 0.80(P/2) \)
Mr. Sobieski asked his class to vote on where they would most like to go on a field trip. The choices he gave them were: history museum, science museum, art gallery, and nature preserve. All 30 students cast one vote each. The pie graph below shows the results.

Complete the table below to show how many votes each choice received.

<table>
<thead>
<tr>
<th>Destination</th>
<th>Number of Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Museum</td>
<td></td>
</tr>
<tr>
<td>Science Museum</td>
<td></td>
</tr>
<tr>
<td>Art Gallery</td>
<td></td>
</tr>
<tr>
<td>Nature Preserve</td>
<td></td>
</tr>
</tbody>
</table>

1. How many more students chose the history museum than the science museum?
2. How many students chose the nature preserve or the art gallery?
Mr. Sobieski asked his class to vote on where they would most like to go on a field trip. The choices he gave them were: history museum, science museum, art gallery, and nature preserve. All 30 students cast one vote each. The pie graph below shows the results.

Complete the table below to show how many votes each choice received.

<table>
<thead>
<tr>
<th>Destination</th>
<th>Number of Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Museum</td>
<td>9</td>
</tr>
<tr>
<td>Science Museum</td>
<td>3</td>
</tr>
<tr>
<td>Art Gallery</td>
<td>3</td>
</tr>
<tr>
<td>Nature Preserve</td>
<td>15</td>
</tr>
</tbody>
</table>

1. How many more students chose the history museum than the science museum?

2. How many students chose the nature preserve or the art gallery?
A group of kids spent a week at Big Tree Summer Camp. At the end of the week, the counselors asked campers what their favorite part of camp was. The pie graph shows their responses.

1. What activity did campers enjoy the most?

2. What fraction of the campers chose canoeing as their favorite activity?

3. What fraction of the campers chose horseback riding as their favorite activity?

4. Did more campers choose camp fires or crafts as their favorite activity?

5. Was camp fire or canoeing more popular with the campers?
A group of kids spent a week at Big Tree Summer Camp. At the end of the week, the counselors asked campers what their favorite part of camp was. The pie graph shows their responses.

1. What activity did campers enjoy the most?  
   1. **horseback riding**

2. What fraction of the campers chose canoeing as their favorite activity?  
   2. \( \frac{1}{4} \)

3. What fraction of the campers chose horseback riding as their favorite activity?  
   3. \( \frac{1}{2} \)

4. Did more campers choose camp fires or crafts as their favorite activity?  
   4. **camp fires**

5. Was camp fire or canoeing more popular with the campers?  
   5. **canoeing**
Mixed Numbers

Write a mixed number to show what part of each illustration is shaded.

a. 

b. 

c. 

d. 

e. 

f. 

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ANSWER KEY

a. 2 1/4
b. 3 1/3
c. 4 3/5
d. 5 1/2
e. 3 1/2
f. 4 4/5