**Fraction Action**

Bill, Rasheed, and Juan own a hobby shop. Juan owns \(\frac{5}{8}\) of the shop. Rasheed owns twice as much as Bill. What fraction of the shop does Bill own?

**Probability Pizzazz**

Andy and Fran are playing a game that involves tossing two fair number cubes, numbered one to six, and recording the sum of the two numbers. How many different sums are possible? What is the greatest possible sum?

**Geometry Gems**

Each side of a regular octagon measures \(x + 3\) cm. Write a simplified expression to represent the perimeter of this figure.

**Solve This!**

**Number Sense**

Rearrange the following to make a true equation.

\[1 \times 2 \div 3 \div 4 = ?\]

**Mathematically Speaking**

Explain why you can multiply two decimal numbers together and get an answer less than either one of the numbers you multiplied.
1. \(222 + p + 4 = 259\) 
Write answers here:
1. __________

2. \(\frac{8}{15} - \frac{2}{15} =\)
2. __________

3. \(7 + 0.08531 =\)
3. __________

4. \(125 \times 28 =\)
4. __________

5. \(15 \text{ feet} = ___ \text{ yds}\)
5. __________

6. What is the measure of each of the interior angles of an equilateral triangle?
6. __________

7. Find the median for the following test grades: 
   95, 98, 88, 91, 85, 94.
7. __________

8. \(21 - 6 \times 3 =\)
8. __________

9. If you toss a fair coin 250 times, about how many times should it land on tails?
9. __________

10. Draw the next figure in the pattern.
10. __________

---

### Mental Math

Directions to Students: 
Write your answers as the questions are called out. Each question will be repeated only once.

<table>
<thead>
<tr>
<th>1</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>
**Fraction Action**

Bill owns \(\frac{1}{8}\), Rasheed owns \(\frac{2}{8}\), and Juan owns \(\frac{5}{8}\).

**Solve This!**

One solution is \(3 \times 4 = 12\).

**Mathematically Speaking**

When a number is multiplied by a number less than one, it gets smaller.

**Probability Pizzazz**

11; 12

**Geometry Gems**

8x + 24

---

**Mental Math**

This section provides an opportunity for sharpening students' mental computation.

1. Which is greater: \(\frac{1}{2}\) or .55?
2. What is \(\frac{2}{5}\) when written as a decimal?
3. Give two other forms of the fraction \(\frac{6}{4}\).
4. Write three fractions equivalent to the number 4.
5. What is \(\frac{1}{4}\) of 500?
6. 45 + 35 + 25 + 15 + 5
7. 40 – 29.99
8. 980 ÷ 20
9. 36 × 25
10. Add the factors of 10.

---

**Mental Math**

1. 0.55
2. 0.4
3. \(\frac{3}{2}\) or \(1 \frac{1}{2}\)
4. Some possibilities:
   \(\frac{8}{2}, \frac{4}{1}, \frac{12}{3}\)
5. 125
6. 125
7. 10.01
8. 49
9. 900
10. \(1 + 2 + 5 + 10 = 18\)
**Fraction Action**

A mechanic makes $15.25 an hour for a forty hour work week. She pays $0.25 of her income in taxes. She saves 0.20 of her income. After paying taxes and putting money in savings, how much does she have left each week?

**Probability Pizzazz**

Mrs. Allen is eating lunch at the cafeteria. She decided to have one salad, one dessert, and one drink. There are four salad choices, five dessert choices, and three drink choices. How many different lunch combinations are possible?

**Geometry Gems**

Find the area and perimeter of the figure below:

**Solve This!**

Make a table

Gary spent $2.30 when he bought 8 pieces of fruit. Apples cost $0.25 and pears cost $0.35. How many of each fruit did he buy?

<table>
<thead>
<tr>
<th>Apples</th>
<th>Cost</th>
<th>Pears</th>
<th>Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mathematically Speaking**

Ann is five years older than twice her brother Dan’s age, \( a \). Write an algebraic expression to represent the sum of their ages.
**Keeping Skills Sharp**

1. \(120 - b = 102\)
2. \(405 \times \frac{1}{5} = \)
3. \(8 - 0.28 = \)
4. \(2586 \div 3 = \)
5. \(15,840 \text{ feet} = \) _____ miles
6. Find the perimeter of the triangle whose sides measure 7.5 cm, 7.1 cm, and 8.2 cm.
7. Find the mode for the following set of measurements:
   5 m, 7 m, 5 m, 5 m, 7 m, 6 m, 10 m, 5 m, 7 m
8. \(23 - (6 + 2) \div 2 = \)
9. If you roll a fair six-sided number cube, what is the probability of rolling an odd number?
10. Complete the pattern: 12, 6, 3, 1.5, ___, ___, ___

**Mental Math**

Directions to Students:
Write your answers as the questions are called out. Each question will be repeated only once.

Write answers here:
1. ___________
2. ___________
3. ___________
4. ___________
5. ___________
6. ___________
7. ___________
8. ___________
9. ___________
10. ___________
Fraction Action
$15.25 \times 40 \text{ hours} = $610.00

\frac{1}{4} \text{ of } 610 = 152.50

\frac{1}{5} \text{ of } 610 = 122

$335.50 \text{ is left.}

Geometry Gems  Probability Pizzazz
Perimeter = 58 meters  60 possible combinations
Area = 66 square meters

Solve This!

<table>
<thead>
<tr>
<th>Apples</th>
<th>Cost</th>
<th>Pears</th>
<th>Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>$1.25</td>
<td>3</td>
<td>$1.05</td>
<td>$2.30</td>
</tr>
</tbody>
</table>

Mathematically Speaking
$3x + 5$

Mental Math
This section provides an opportunity for sharpening students' mental computation.

1. 640 + 280
2. 1000 – 390
3. 47.6 – 12.4
4. 14.0721 to the nearest hundredth
5. 57,412 to the nearest thousand
6. Find the area of a square where one side is 4 meters.
7. What is \(\frac{1}{2}\) of 1200?
8. What is 3 times 410?
9. What is \(\frac{1}{2}\) of 5 written as a decimal?
10. Divide 100 by 10, add 3, subtract 7 and multiply by 2.
**Fraction Action**

Chef Lee made a recipe of soup which yields 30 cups. If he puts \(1 \frac{1}{4}\) cups of soup in each serving, how many servings does he have?

**Solve This!**

Mark tutors for his little brother for \(1 \frac{1}{4}\) hours each weekday afternoon and \(2 \frac{3}{4}\) hours on Saturday. What is the total number of hours he tutors his brother in a week?

**Probability Pizzazz**

Barry is tossing two fair number cubes, numbered one to six, and recording the product of the two numbers. What is the probability that the product will be an even number? a number less than or equal to six?

**Geometry Gems**

If the length of a rectangle is twice its width, \(w\), write an expression to represent the perimeter of the rectangle. If the perimeter of the rectangle is 72 inches, what is the length and width of the rectangle?

**Mathematically Speaking**

Simplify: \(14x + 8 - 20x ÷ 5 + 2(x - 1)\)
Keeping Skills Sharp

1. $Z - 22 = 26$
2. What is the name of the point where the sides of an angle intersect?
3. $8.51 - 3.2 = $
4. Estimate: $295 \div 19$
5. 1 gallon = ___ cups
6. Find the area of a walkway that goes around a rectangular swimming pool. The pool has a length of 30 feet, and a width of 18 feet. The walkway has a width of 4 feet all around the pool.
7. Find the range of the following temperature readings:
   $25^\circ$, $5^\circ$, $101^\circ$, $16^\circ$, $78^\circ$
8. $6 \times (100 - 76) = $
9. If you roll a fair six-sided number cube. What is the probability of rolling an eight?
10. Complete the pattern: 1, 2, 6, 24, ___, ___

Mental Math

Write your answers as the questions are called out. Each question will be repeated only once.

1
2
3
4
5
6
7
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9
10
Solve This!

He babysits for 9 hours in a week.

Fraction Action
24 servings

Geometry Gems
Perimeter = 6x
length = 24 inches
width = 12 inches

Mathematically Speaking
12x + 6

Probability Pizzazz
P (even number) = \( \frac{27}{36} \) or \( \frac{3}{4} \)

P (number \( \leq 6 \)) = \( \frac{14}{36} \) or \( \frac{7}{12} \)

Mental Math
1. \( 22 \times 1,000 \)
2. \( 13 \times 100 \)
3. \( 720 \div 9 \)
4. \( 6,500 \div 10 \)
5. \( 4,870 - 210 \)
6. \( \frac{3}{7} \times \frac{7}{10} \)
7. How many ounces are in \( 2\frac{1}{2} \) pounds?
8. How many quarts are in 10 pints?
9. 8 feet = \( \_\_ \) yards
10. List the prime numbers from 2 to 20.

Mental Math
1. 22,000
2. 1,300
3. 80
4. 650
5. 4,660
6. \( \frac{3}{10} \)
7. 40 ounces
8. 5 quarts
9. \( 2 \frac{2}{3} \) yards
10. 2, 3, 5, 7, 11, 13, 17, 19