

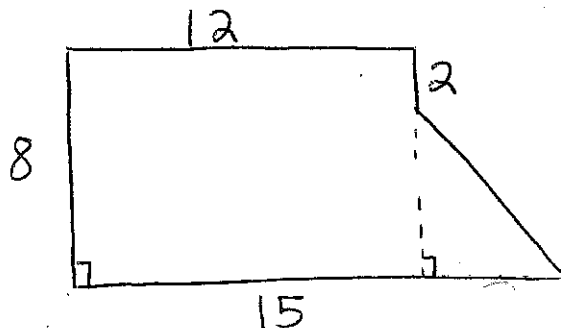
Saint John's Summer Math

Incoming 8th Grade (8P Class)

- You must do all your work in a composition notebook
 - Start a new page for each week
 - Number the problems
 - Put circled answers on the right hand margin of the page
 - There are ten problems for each of the ten weeks of summer vacation
 - The entire set of 100 problems is due the first day of school and will be your first quiz grade

Week #1

1. Three thousand, six hundred ninety people finished the half-marathon. If two-thirds of the finishers walked a portion on the course, how many finishes *did not* walk during the race?
2. $5 \times 4 - (2 - 1)$
3. $1\frac{1}{2} - \frac{5}{8}$
4. Evaluate: $ab^2 + a$, if $a = 2$, and $b = 4$
5. Change $\frac{3}{5}$ into a decimal and a percent.
6. Solve for x : $x + 14 = 21$
7. Solve for x : $\frac{3}{5} = \frac{15}{x}$
8. Put into standard form: 3.1×10^4
9. Find the mean of 17, 23, 14, 26, 30, and 14.
10. Find the area of the figure below. Dimensions are in inches.

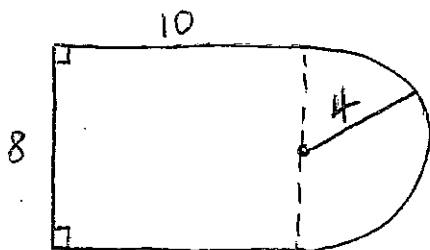


Week #2

1. Of the fifty states in the United States, four twenty-fifths of them begin with the letter "M". How many of the fifty states begin with the letter "M"?
2. $9 \times (3 + 3) \div 6$
3. $1\frac{2}{3} \times 4\frac{3}{5}$
4. Evaluate: $n^2 - m$, if $n = 8$, and $m = 7$
5. How much money is 20% of \$50?
6. Solve for y : $20 = \frac{y}{4}$
7. $\frac{15}{30} = \frac{x}{34}$
8. Put 34,000 into Scientific Notation.
9. Find the mode of: 10, 12, 40, 23, 12, 80, and 40.
10. What is the area of a circle with a radius of 7 meters?

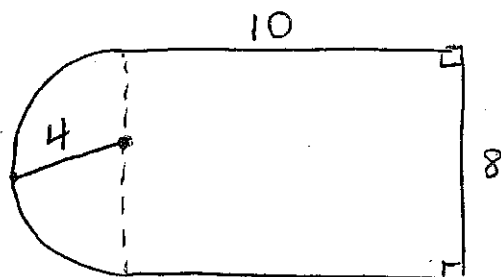
Week #3

1. Cynthia planted 12 potted plants in the last 3 weeks. At that rate, how many would she plant in 5 weeks? Use a ratio box to solve.
2. $7 \times 7 - (8 - 2)$
3. $-\frac{5}{24} \div \frac{7}{12}$
4. Evaluate: $8(x - y)$, if $x = 5$, and $y = 2$
5. Change 35% to a fraction and a decimal.
6. $-9 + x = -26$
7. $\frac{6}{x} = \frac{18}{42}$
8. Put 5.6×10^{-6} into standard form
9. What is the median of 27, 18, 33, 56, and 11?
10. Find the area of the figure below. Dimensions are in centimeters.



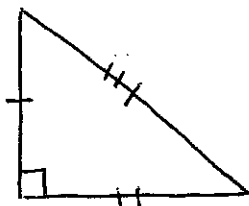
Week #4

1. The volleyball team has 5 wins and 7 losses. What fraction of their games will they have won if they win their next 3 games?
2. $(4 - 1 + 8 \div 8) \times 5$
3. $2\frac{1}{2} \div 1\frac{2}{5}$
4. Evaluate: $15 - (m + p)$, if $m = 3$, and $p = 10$
5. Estimate a 15% tip on a \$68.00 dinner.
6. $41k = -2747$
7. $\frac{x}{36} = \frac{21}{27}$
8. Multiply. Write your answer in Scientific Notation. $(1.34 \times 10^2)(2.0 \times 10^3)$
9. Find the mean of 20, 15, 10, 45, 65, and 25.
10. Find the perimeter of the figure below. Dimensions are in inches.



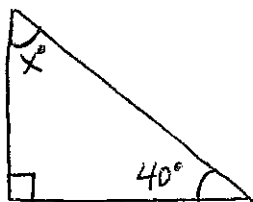
Week #5

1. Of the 2,800 visitors to the fair, only $\frac{3}{70}$ won a prize. How many visitors won prizes?
2. $[3(7 \times 7) + (2 - 4)]$
3. $\frac{3}{4} + 1\frac{2}{3} + 2\frac{5}{6}$
4. Evaluate: $p - 2 + pq$, if $p = 7$, and $q = 4$.
5. How much would a \$75.00 dress cost if it was on sale for 20% off?
6. $-8 = p - 13$
7. $\frac{36}{x} = \frac{15}{20}$
8. Write 0.0000563 in Scientific Notation
9. What is the mode of 1, 3, 5, 3, 3, 7, 7, and 3?
10. Classify the triangle below by its sides and angles.



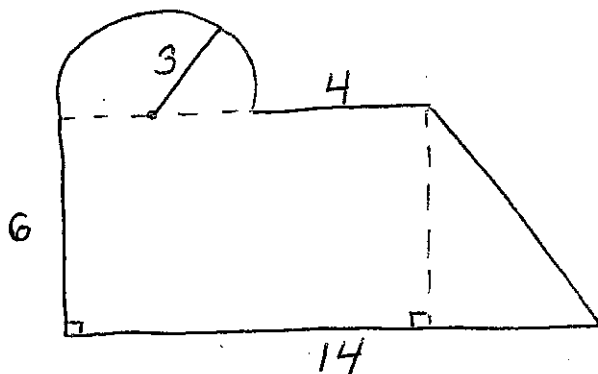
Week #6

1. One thousand pounds of grain were packaged in five-pound bags. How many bags were needed?
2. $3[(9 + 6) \div (8 - 2)]$
3. $6.135 \div 0.03$
4. Evaluate: $zy + 4y$, if $y = 5$, and $z = 2$
5. 120 is what percent of 160?
6. $-176 = h - 219$
7. $\frac{11}{6} = \frac{x}{20}$
8. Write 86,000,000 in Scientific Notation
9. Find the mean of $\frac{5}{8}, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}$
10. Find the missing angle:



Week #7

1. There were 20 students in the algebra class. One-half of the students were boys. One-half of the boys wore t-shirts. How many boys wore t-shirts in the algebra class?
2. $2^2(4 + 3 - 6)$
3. 5.56×0.3
4. Evaluate: $b(a + b)$, if $a = 9$, and $b = 4$
5. What number is 35% of 150?
6. $5 = \frac{x}{3} - 9$
7. $\frac{26}{15} = \frac{130}{a}$
8. Multiply. Write your answer in Scientific Notation. $(3 \times 10^2)(5 \times 10^3)$
9. Find the median of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
10. Find the area of the figure below. Dimensions are in meters.



Week #8

1. The Acme Scrap Metal Company pays \$0.45 per pound for aluminum cans. Troy wants to sell 54.2 lbs of cans. How much money should he receive?
2. $8 - 1(18 - 2) \div 2$
3. Add: 1.23, 0.004, and 15.2
4. Evaluate: $x(y \div 3)^2$, if $x = 4$, and $y = 9$
5. Convert $\frac{3}{5}$ to a decimal and a percent.
6. $x - 19.7 = -17.48$
7. $\frac{36}{j} = \frac{15}{20}$
8. Put into standard form: 7.805×10^{-3}
9. Find the mode of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
10. What is the circumference of a circle with a diameter of 10 millimeters?

Week #9

1. A recipe for chili calls for four and one-fourth pounds of beans. Azza wants to make two and a half times the recipe. How many pounds of beans will she need?
2. $3^4 + 7 \times 9 - 7 - 3 \times 5$
3. $y^3 \cdot x^3$
4. Evaluate: $mn \div 6 + 10$, if $m = 7$, and $n = 9$
5. What is the total of a \$50 bill and a 15% tip?
6. $k - 55 = 67$
7. $\frac{y}{9} = \frac{26}{6}$
8. Write in Scientific Notation: 1,356.07
9. Find the median of 8.9, 8.7, 8.9, 9.2, 8.8, 8.2, 8.9, and 8.8
10. What is the area of a circle with a diameter of 10 meters?

Week #10

1. Loose birdseed is priced at \$4.29 per pound. Andrew scoops out a small bag for his birdfeeder. It weighs 1.3 pounds. How much will he pay for the birdseed (rounded to the nearest cent)?
2. $5^2 - 3(6 + 8 \times 5)$
3. 3.56×1.02
4. Evaluate: $h + j(j - h)$, if $j = 6$, and $h = 2$
5. 45 increased by 40% is what number?
6. $12.5 = t - 3.55$
7. $\frac{x}{23} = \frac{17}{34}$
8. Multiply. Write your answer in Scientific Notation. $(5.2 \times 10^5)(2.3 \times 10^{-2})$
9. Find the mean of 8, 15, 9, 7, 4, 5, and 1.
10. What is the volume of a cube with sides 8 inches long?