



ST. FRANCIS
DE SALES
CATHOLIC SCHOOL

**Summer Math Packet
for
Students Entering 7th Grade Math and Pre-Algebra 7**

Please have your student complete this packet if they are signed up for the on-level 7th grade math or Pre-Algebra 7 courses. Students should complete and return their packet by Tuesday, September 3.

- Work on your packet gradually. Complete one to two pages each week.
- ALL WORK MUST BE SHOWN FOR FULL CREDIT. (Extra paper may be used for work. Please include this in your packet.)
- The packet must be hole-punched and put into a 3-prong folder.
- The student name must be written on the front of the folder.
- Submit packets by the due date above. (Each day the packet is late will result in a 10% deduction from the grade.)
- The packet will be graded and will count as a quiz grade.
- No packets will be accepted after Friday, September 6.

If you have any questions regarding the summer math packet, please feel free to contact Mrs. Duick at mduick@sfdscs.org.

Section I

Name: _____

Order the numbers from least to greatest:

(1) 2,332 2,323 2,322 2,232

(2) 0.52 0.4 0.14 0.06

Find the sum or difference. You must show all work.

(3) $337.4 + 20.08$

(4) $1.741 - 0.81$

Multiply or divide:

(5) 3.21×9.8

(6) $38.4 \div 0.08$

Section II

Find the mean, median, mode and range of the data sets:

(7) 31, 20, 31, 51, 27

Mean:

Median:

Mode:

Range:

(8) 20, 5, 45, 90, 60, 45, 30, 10, 30, 45, 15, 25

Mean:

Median:

Mode:

Range:

Section III

Solve each equation for x. Then **check your work** using substitution.

(9) $x + 8 = 15$

(10) $x - 1,078 = 4,562$

(11) $5.6 + x = 7$

(12) $x - 2.16 = 3.9$

(13) $78x = 4,368$

(14) $x \div 4 = 32$

(15) $2a + 8 = 26$

(16) $5x - 13 = -18$

(17) $-4 + \frac{h}{4} = 4$

(18) $2 + 8h = 34$

Section IV

Simplify each expression:

(19) $- 32 + 3^3$

(20) $(15 \cdot 3 - 1) - 32$

(21) Find the prime factorization of 28 using a factor tree.

(22) Find the GCF of 16 and 40.

(23) Find the LCM of 10, 20 and 35.

Simplify each fraction.

(24) $\frac{5}{20}$

(25) $\frac{4}{6}$

(26) $\frac{72}{90}$

Rewrite each improper fraction as a mixed number.

(27) $\frac{13}{3}$

(28) $\frac{58}{6}$

Rewrite each mixed number as an improper fraction.

(29) $4\frac{4}{5}$

(30) $8\frac{2}{5}$

Section V

Find each sum or difference. Write your answer in simplest form.

(31) $\frac{4}{5} + \frac{2}{5}$

(32) $\frac{11}{13} - \frac{7}{13}$

(33) $\frac{9}{20} + \frac{4}{5}$

(34) $\frac{3}{4} - \frac{3}{8}$

(35) $3\frac{3}{4} - 2\frac{8}{10}$

(36) $8\frac{1}{5} + 4\frac{1}{6}$

Solve each equation for x. Then **check your work** using substitution.

$$(37) \ x - \frac{4}{5} = \frac{11}{20}$$

$$(38) \ \frac{6}{9} = \frac{1}{3} + x$$

$$(39) \ 4\frac{3}{4} + x = 17\frac{1}{8}$$

$$(40) \ 13\frac{2}{3} = x - 10\frac{7}{9}$$

Section VI

Multiply. Write your answer in simplest form.

$$(41) \ \frac{3}{8} \cdot 32$$

$$(42) \ \frac{5}{6} \times \frac{12}{25}$$

$$(43) \ \frac{7}{9} \cdot 5\frac{4}{7}$$

Divide. Write your answer in simplest form.

(44) $15 \div \frac{9}{11}$

(45) $\frac{2}{5} \div \frac{8}{25}$

(46) $6\frac{3}{4} \div 4\frac{1}{2}$

Section VII

Solve each proportion. Then **check your work** using substitution.

(47) $\frac{4}{5} = \frac{x}{25}$

(48) $\frac{6}{4} = \frac{9}{x}$

(49) $\frac{x}{25} = \frac{3}{10}$

Write each percent as a decimal AND as a fraction.

(50) 25%

(51) 6%

Find each percent.

(52) 2% of 50

(53) 80% of 8

(54) Suppose you buy a DVD for \$12.98. The sales tax is 7%. Find your total cost.

Section VIII

Find the complement and supplement of the angle measure.

(55) 72° complement: _____ supplement: _____

Match the type of triangle with its definition. Draw a line to the correct definition.

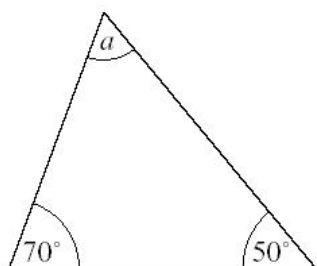
(56) Scalene a. a triangle with two equal sides

(57) Isosceles b. a triangle with three equal sides

(58) Equilateral c. a triangle with no equal sides

Find the missing angle measure, x.

(59)



Section IX

Convert each measurement.

(60) 672 mm to cm

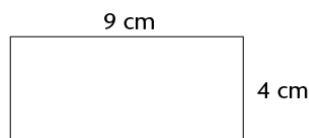
(61) 25,040 mL to L

(62) 35.1 kg to g

Find the perimeter and area of each figure.

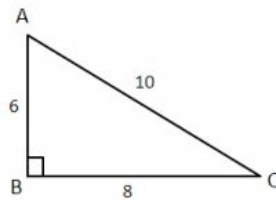
(63) $P =$ _____

$A =$ _____



(64) $P =$ _____

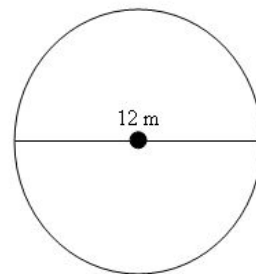
$A =$ _____



Find the circumference and area of the circle.

(65) $C =$ _____

$A =$ _____



Section X.

A jar contains 2 red, 4 yellow, 3 green, and 5 blue marbles. You select a marble without looking, then you put it back. Find each probability.

(66) $P(\text{yellow})$

(67) $P(\text{green})$

(68) $P(\text{red or blue})$

Using the same jar of marbles, now you select 2 marbles with replacement. Find each probability.

(69) $P(\text{blue, then red})$

(70) $P(\text{both not green})$

XI. Simplify.

(71) $-5 + 17$

(72) $-27 - (-27)$

(73) $-3 - 1$

(74) $-72 + (-57)$

(75) $(-8)(5)$

(76) $\frac{-18}{-9}$

XII. Solve **and** graph the solution of each inequality.

(77) $m + 8 < 14$

(78) $p + 9 \geq 2$

Find each square root.

(79) $\sqrt{49}$

(80) $\sqrt{144}$

(81) $\sqrt{196}$