

Name: _____

SUMMER WORK FOR STUDENTS
ENTERING GRADE 6

Dear St. Stephen's Students,

Surely you would never go an entire summer without reading, right? And so, you should also not pass an entire summer without keeping up with your math skills. Please complete this packet and bring it to your math teacher when school begins in September. This will help you maintain all of the great knowledge you learned in the fifth grade. If you work the problems on looseleaf please staple it to this packet. Have a wonderful summer and keep calculating.

Sincerely,
Mrs. Tappert, The Math Coach

Solve the following one step equations using the inverse operation. Check you answers.

1) $n + 36 = 52$ 2) $n - 18 = 216$ 1) _____

2) _____

3) $8n = 72$ 4) $\frac{n}{12} = 6$ 3) _____

4) _____

5) $4.8 + n = 8.9$ 6) $3.6n = 144$ 5) _____

6) _____

Solve each equation by following the order of operations.

7) $(7^2 + 1) \div 5$ 8) $4^2 - 3 \cdot 4 + (6 - 6)$ 7) _____

8) _____

9) $(4 + 8) \div 3 \cdot 5 + (2^2 - 9)$ 9) _____

10) Evaluate $2a + 3b$ if $a = 4$ and $b = 12$.

10) _____

Round each number to the nearest tenth.

11) 34.925 _____ 12) 326.71 _____ 13) 8.0808 _____

Round each number to the nearest hundredth.

14) 427.9261 _____ 15) 3.3006 _____

Multiply and divide by powers of ten (remember when you multiply the decimal moves to the right, when you divide the decimal moves to the left with the exponent indicating how many places it moves.)

16) $275 \times 10^3 =$ _____ 17) $8.82 \times 10^4 =$ _____

18) $389 \div 10^2 =$ _____ 19) $7.5 \div 10^3 =$ _____

Add or subtract. Be sure your decimal is in the correct place in the answer. You may rewrite these problems vertically.

20) $16.8 + 9.25 + 315.22$ 21) $875.7 - 29.375$ 20) _____

21) _____

22) $958.36 + 129.838$ 23) $624.77 - 39.9$ 22) _____

23) _____

Multiply or divide. Be sure your decimal is placed correctly in the answer.

24) 8.47×9.4 25) $76.5 \times .23$ 24) _____

25) _____

26) $48.28 \div 68$ 27) $3.648 \div .57$ 26) _____

27) _____

Complete each proportion so that the fractions are equivalent.

28) $\frac{3}{7} = \frac{n}{21}$ 29) $\frac{3}{1} = \frac{n}{5}$ 30) $\frac{1}{n} = \frac{9}{54}$ 28) _____

29) _____

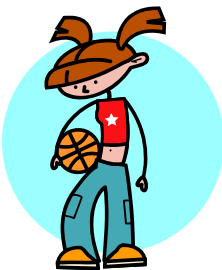
30) _____

31) Find all of the factors of 88. 31) _____

32) Find the prime factorization of 120. 32) _____

33) In a single elimination basketball tournament, teams are eliminated when they lose. If 32 teams are involved, how many games must be played to determine a tournament winner?

33) _____



34) Find the mean for the following set of numbers. Round your answer to the nearest tenth. {11.7, 8.0, 7.9, 6.6}

34) _____

35) Find the median, mode and range of the following set: {15, 19, 11, 8, 8, 14}

Median: _____

Mode: _____

Range: _____

36) Billy had a balance of \$570.25 in his checking account. He made a deposit of \$65 and wrote a check for \$202.18. What was his new balance?

36) _____



37) A gallon of apple juice costs \$2.29, a gallon of orange juice costs \$3.99, and a gallon of milk costs \$2.89. What is the total cost of 2 gallons of milk and a gallon of apple juice?

37) _____



38) Danielle is fencing in a vegetable garden this summer. The garden has 6 sides, each 9 meters in length. How much fencing does she need?

38) _____



39) Find the area of a swimming pool that is 32 feet by 40 feet.

39) _____



40) A rectangular lot has a perimeter of 290 feet. Two of the sides measure 60 feet. How long are the other two sides?

40) _____

41) There are 6 numbers in an arithmetic sequence. The sixth number is 42 and the common difference between the numbers is 3. What is the first number?

41) _____

42) Jack, Jill, and Joe each went on a summer vacation. One person went on a vacation by the sea, one person went to the jungle and one person went to the mountains. Joe does not like to walk long distances. Jill gets dizzy in high altitudes. Where did each person go on their vacation?

43) An even number is greater than 5×3 and less than 7×3 . It is also a square number. Find the number.

43) _____

44) Solve: $18\frac{3}{5} - 7\frac{13}{15}$

45) $9\frac{1}{2} + 3\frac{2}{3}$

44) _____

45) _____

46) $12 - 8\frac{7}{8}$

47) $15\frac{5}{6} + 14\frac{3}{4}$

46) _____

47) _____

48) $5\frac{5}{6} \cdot 2\frac{4}{5}$

49) $4\frac{2}{5} \cdot 3$

48) _____

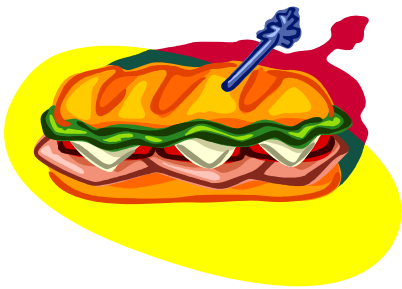
49) _____

50) What is the sales tax on a purchase of \$88.75 if the tax rate is 8%? (all you have to do is multiply the dollar amount x .08 to find the sales tax).

50) _____

51) A giant sub sandwich was ordered for your summer party. It is 2 feet long. How many slices will be made if each piece 3 inches thick? How many people will be able to share if each one gets one slice of the sub sandwich?

51) _____



52) The sum of two numbers is 22. The product of the two numbers is 72. What are the two numbers?

52) _____

53) David gave Mark dimes and quarters for 18 nickels. If David gave Mark 6 coins, how many of each coin did Mark receive?

53) _____

54) A die is rolled one. What is the probability of rolling a 4 or 5? 54) _____

55) Write 56% as a fraction in simplest form. 55) _____

56) Every fourth customer at a store gets a free bumper sticker and every 10th customer gets a 10% discount. Out of the first 100 customers, how many will receive a bumper sticker and a discount? Which customers are they?

56) _____

57) Draw a picture to solve this problem: Pedro wants to travel from city A to city B. From A he can travel through cities C or D. From C he can travel through cities E or F to B. From D he would travel directly to B. How many possible routes are there from city A to city B?

58) Draw a Venn diagram to solve this problem. Always start in the middle of the diagram and then work your way out to the overlapping parts of the circles until you finally get to the non-overlapping sections.

In a survey, teens were asked what type of movies they saw last month. Twenty four saw action, 22 saw thrillers, 26 saw comedies, 9 saw action and comedies, 8 saw action and thrillers, 5 saw comedies and thrillers, and 3 saw all three types. How many teens were surveyed?

59) Find the percent of decrease on a radio originally priced \$48 on sale for \$36.

59) _____

60) Poor Mr. Norton. His only form of exercise is swimming. He only swims in the summer because the water is too cold in the winter. He weighed 185 pounds on his 30th birthday. Each winter he gains about 6 lbs, and each summer he loses about 4 lbs. At this rate, how much will he weigh when he is 40 years old?

60) _____

4 IN A ROW

The object of the game is to get a row of 4 tiles horizontally, vertically, or diagonally. You can place a tile on a number by adding, subtracting, multiplying or occasionally dividing. Place two paper clips on 2 numbers along the bottom to come up with your number. Take turns. When it is your turn you **MUST** move one paper clip only. They can both be on the same number but you cannot skip a turn or leave it on the same combination that your opponent chose. Play to block and also to win!

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
25	27	28	30	32	35
36	40	42	45	48	49
54	56	63	64	72	81

1 2 3 4 5 6 7 8 9