

Saint Philomena School Math

Summer Math Packet for Students  
Entering 7<sup>th</sup> grade math(on level or  
advanced) or 8<sup>th</sup> grade Pre-algebra

Dear Parent/Guardians,

This packet is meant to provide your child with a review of the material your child learned in their current math course. Your child is expected to return this completed packet to his/her math teacher on the first day of school. Please have your child pace themselves; it is to no one's benefit to wait until the last day of summer to start the packet. As your child completes the packet, have them do the following:

- Show work, on a separate sheet if needed
- Do not use a calculator.

Thank you!

1) Write the value of the underlined digit in 123.456

10) Find the sum:  $0.006 + 0.3$

2) Write 41.005 in words.

11) Find the sum:  $8.3 + 14 + 3.53$

3) Write one hundred three and fifteen hundredths.

12) Find the difference:  $7.43 - 5.6$

4) Use  $>$ ,  $<$ , or  $=$  to compare: 2.53 and 2.525

13) Find the difference:  $9.07 - 0.304$

5) Use  $>$ ,  $<$ , or  $=$  to compare: 72.520 and 72.52

14) Find the difference:  $82 - 5.72$

6) Order the numbers from least to greatest:

3.21, 0.321, 32.1, 0.32, 2.31

15) Find the product:  $5.32 \times 8$

7) Round 356.74 to the nearest whole number.

16) Find the product:  $17 \times 45.3$

8) Round 146.256 to the nearest tenth.

17) Find the product:  $3.4 \times 2.7 \times 5$

9) Round 27.584 to the nearest hundredth.

18) Find the quotient:  $6.4 \div 8$

19) Find the quotient:  $36 \div 2.4$

26) Write  $\frac{7}{21}$  in simplest form.

20) Find the quotient:  $10.17 \div 5$

27) Write  $5\frac{8}{12}$  in simplest form.

21) Find the area of a rectangle with length 5 inches and width 2.7 inches.

28) Find the LCD (least common denominator):  $\frac{3}{4}$  and  $\frac{5}{8}$

22) Paula is buying lunch. She buys an ice tea for \$1.15, a turkey sandwich for \$3.52, and a bag of chips for \$.95. What is the total she pays for lunch?

29) Find the LCD (least common denominator):  $\frac{2}{3}$ ,  $\frac{1}{4}$ , and  $\frac{5}{6}$

23) Using your answer from #22, how much change will Paula get if she pays with a \$10 bill?

30) Write  $\frac{33}{5}$  as a mixed number.

24) What portion of the circle is shaded? Express your answer as a decimal and fraction.

31) Write  $5\frac{3}{7}$  as an improper fraction.



25) What portions of the rectangle is shaded? Express your answer as a simplified fraction.



32) Find the sum:  $\frac{4}{9} + \frac{3}{9}$

39) Find the product:  $\frac{1}{3} \times 9$

33) Find the difference:  $\frac{8}{12} - \frac{5}{12}$

40) Find the quotient:  $\frac{7}{9} \div \frac{1}{5}$

34) Find the sum:  $4\frac{4}{8} + 3\frac{1}{8}$

41) Find the quotient:  $\frac{11}{12} \div \frac{2}{9}$

35) Find the difference:  $4\frac{6}{10} - 1\frac{3}{10}$

42) Find the unit rate for 420 calories in 6 servings.

36) Find the sum:  $\frac{6}{7} + \frac{3}{14}$

43) Find the unit rate for \$19.50 for 3 T-shirts.

37) Find the difference:  $1 - \frac{1}{3}$

44) Do the ratios form a proportion?

$$\frac{2}{5} \text{ and } \frac{8}{20}$$

38) Find the product:  $\frac{2}{3} \times \frac{3}{4}$

45) Do the ratios form a proportion?

$$\frac{8}{5} \text{ and } \frac{36}{20}$$

46) Write the percent as a decimal: 18%

54) Find the mean, the median and the mode for the data:

16,28,15,18,19,23,27,12,14,17,25

47) Write the percent as a decimal: 5%

48) Write the percent as a fraction: 45%

55) Bill scored 100%, 100%, 90%, 70% and 60% on five quizzes. Find the mean, median, and mode.

49) Write the percent as a fraction: 9%

50) Write the decimal as a percent: 0.56

A.) Which makes his grades look the highest, the mean, the median or the mode?

51) Write the decimal as a percent: 0.07

52) Write the fraction as a percent:  $\frac{6}{25}$

B.) Which measure should his teacher use to convince Bill to study harder for his quizzes?

53) Write the fraction as a percent:  $\frac{1}{2}$

56) Name a positive or negative number to represent an increase of 15 points in your math grade.

57) Name a positive or negative number to represent spending \$42.

58) Compare  $11$    $-7$ . Use  $<$ ,  $=$ , or  $>$ .

59) Order the integers 3, -8, 8, and 0 from least to greatest.

For problems 60 and 61, name the opposite of the integer.

60) 4

61) -1

For problems 62 and 63, Find the absolute value.

62)  $|7|$

63)  $|-2|$

64) Compare  $|8|$    $|-8|$ . Use  $<$ ,  $=$ , or  $>$ .

65) The four best scores from an amateur golf tournament sponsored by a local golf club are given in the table. Since the lowest score wins, which golfer won the tournament?

Player	Score
Mr. Benitez	-1
Mr. Hill	-4
Mr. Williams	-5
Mr. Hayashi	6

For problems 66 - 69, solve each equation.

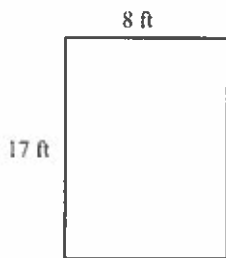
66)  $x + 11 = 12$

67)  $q - 29 = 57$

68)  $\frac{b}{6} = 3$

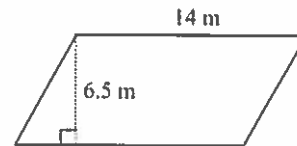
69)  $13v = 195$

70) Find the area of the rectangle.



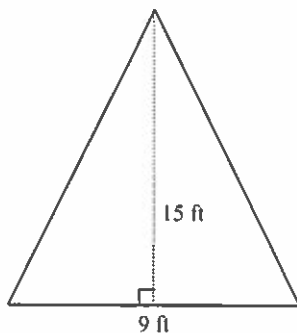
- a.  $136 \text{ ft}^2$                       c.  $25 \text{ ft}^2$   
b.  $272 \text{ ft}^2$                       d.  $50 \text{ ft}^2$

71) Find the area of the parallelogram.



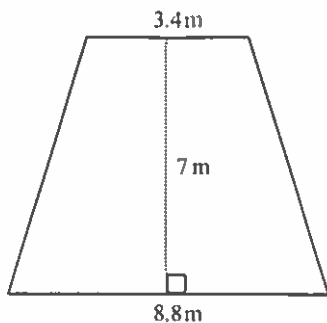
- a.  $20.5 \text{ m}^2$                       c.  $91 \text{ m}^2$   
b.  $41 \text{ m}^2$                         d.  $182 \text{ m}^2$

72) The diagram shows the shape of a window in the attic of a house. Find the area of the window.



- a.  $67.5 \text{ ft}^2$                       b.  $135 \text{ ft}^2$                       c.  $12 \text{ ft}^2$                       d.  $39 \text{ ft}^2$

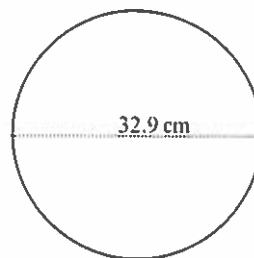
73) Find the area of the trapezoid.



- a.  $42.7 \text{ m}^2$
- b.  $18.9 \text{ m}^2$
- c.  $11.9 \text{ m}^2$
- d.  $6.1 \text{ m}^2$

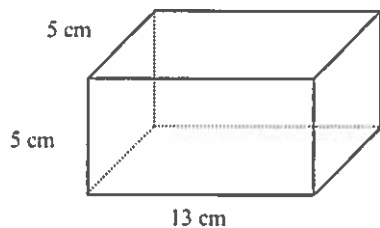
74) Estimate the area of the circle.

Use 3.14 to approximate  $\pi$ .



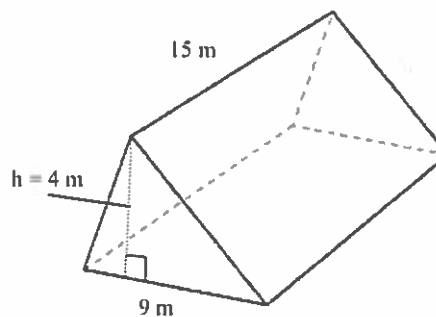
- a. about  $96 \text{ cm}^2$
- b. about  $256 \text{ cm}^2$
- c. about  $768 \text{ cm}^2$
- d. about  $3267 \text{ cm}^2$

75) Find the volume of the rectangular prism.



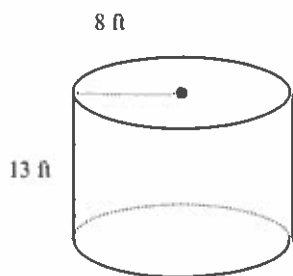
- a.  $310 \text{ cm}^3$
- b.  $184 \text{ cm}^3$
- c.  $325 \text{ cm}^3$
- d.  $23 \text{ cm}^3$

76) Find the volume of the triangular prism.



- a.  $33 \text{ m}^3$
- b.  $540 \text{ m}^3$
- c.  $441 \text{ m}^3$
- d.  $270 \text{ m}^3$

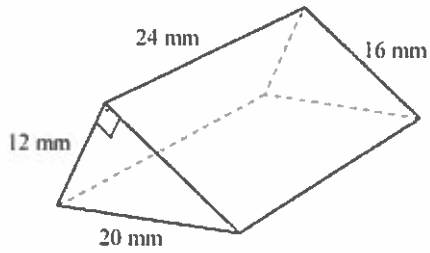
77) Find the volume of the cylinder. Use 3.14 for  $\pi$ . Round your answer to the nearest cubic unit.



- a.  $9,984 \text{ ft}^3$
- b.  $312 \text{ ft}^3$
- c.  $4,056 \text{ ft}^3$
- d.  $2,496 \text{ ft}^3$



78) Find the surface area of the prism.



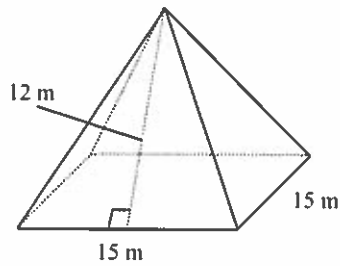
a.  $1344 \text{ mm}^2$

b.  $336 \text{ mm}^2$

c.  $2304 \text{ mm}^2$

d.  $1440 \text{ mm}^2$

79) Find the surface area of the pyramid. If necessary, round your answer to the nearest hundredth.



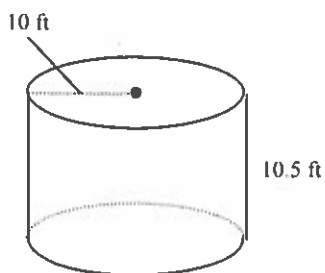
a.  $81,000 \text{ m}^2$

b.  $307.8 \text{ m}^2$

c.  $360 \text{ m}^2$

d.  $585 \text{ m}^2$

80) Find the surface area of the cylinder. Use 3.14 for  $\pi$ . Round your answer to the nearest hundredth.



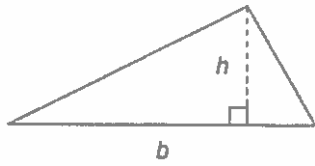
a.  $973.4 \text{ ft}^2$

b.  $722.2 \text{ ft}^2$

c.  $1,915.4 \text{ ft}^2$

d.  $1,287.4 \text{ ft}^2$

### Triangle



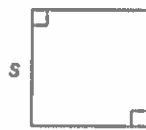
$$A = \frac{1}{2}bh$$

### Rectangle



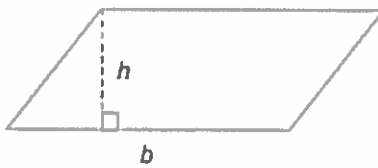
$$A = lw$$

### Square



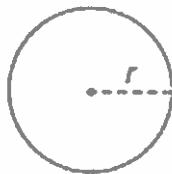
$$A = s^2$$

### Parallelogram



$$A = bh$$

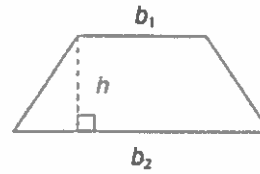
### Circle



$$C = 2\pi r$$

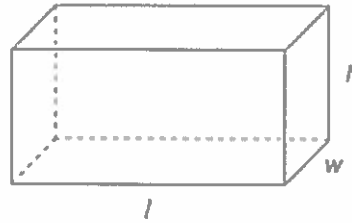
$$A = \pi r^2$$

### Trapezoid



$$A = \frac{1}{2}h(b_1 + b_2)$$

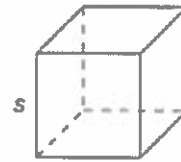
### Rectangular Prism



$$V = lwh$$

$$SA = 2lw + 2lh + 2wh$$

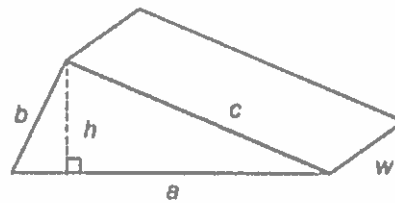
### Cube



$$V = s \cdot s \cdot s$$

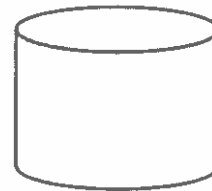
$$SA = 6s^2$$

### Triangular Prism



$$SA = ah + aw + bw + cw$$

### Cylinder



$$V = \pi \cdot r^2 \cdot h$$