

**6th-8th Grade Mathematics 2023-2024
Dr. Rolando Espinosa K-8 Center**

SUMMER PACKET

For ENTERING ALGEBRA 1 HONORS



This project will be due the first week of school and it will be graded. These are the concepts are expected to know coming into the Algebra 1 Honors. Make sure that you show all your work for each question. You should complete the entire packet **without** the use of a **calculator**. No credit will be given to any question(s) you answer without showing work. **Please use pencil only** and remember:

NO WORK = NO CREDIT

Name: _____

Teacher: _____ Period: _____

Assignment

- 1) Jessica and her best friend found some money under the couch. They split the money evenly, each getting \$16.32. How much money did they find?
- 2) Dan bought four candy bars for a total of \$24.96. How much did each candy bar cost?
- 3) Heather had some candy to give to her five children. She first took eight pieces for herself and then evenly divided the rest among her children. Each child received four pieces. With how many pieces did she start?
- 4) On Tuesday Alberto bought six hats. On Wednesday half of all the hats that he had were destroyed. On Thursday there were only 13 left. How many did he have on Monday?

Find each square root.

5) $\sqrt{1}$

6) $\sqrt{16}$

7) $\sqrt{\frac{9}{81}}$

8) $\sqrt{\frac{100}{36}}$

Evaluate each expression.

9) $(-1) - 5$

10) $2 - (-3)$

$$11) (-4) - (-5)$$

$$12) 7 - (-8)$$

$$13) 2 - \frac{9}{7}$$

$$14) \frac{2}{5} + \left(-\frac{12}{7}\right)$$

$$15) \frac{1}{4} - \frac{2}{3}$$

$$16) \left(-\frac{7}{8}\right) - \left(-\frac{2}{3}\right)$$

Find each product.

$$17) -3\frac{2}{9} \times -\frac{1}{3}$$

$$18) \frac{23}{5} \cdot -\frac{15}{4}$$

$$19) \left(-2\frac{3}{5}\right)(-6)$$

$$20) \left(-2\frac{5}{7}\right)\left(\frac{1}{4}\right)$$

Find each quotient.

$$21) \frac{-\frac{4}{5}}{\frac{7}{9}}$$

$$22) \frac{\frac{11}{7}}{-2}$$

$$23) 4\frac{3}{10} \div \frac{-5}{3}$$

$$24) -1\frac{1}{4} \div 1\frac{5}{9}$$

Solve each equation.

$$25) x - 13 = -31$$

$$26) v + 5 = -4$$

$$27) -1 + r = -8$$

$$28) 4 = \frac{b}{17}$$

Evaluate each expression.

29) $\frac{18}{6-3}$

30) $6 + 5 - 6$

31) $(6 - 1.9)^2$

32) $5.7 + 4.8 + 1.2$

33) $3\frac{1}{2} + 2\frac{3}{4}$

34) $\frac{1\frac{1}{4}}{\frac{11}{6}} + 3\frac{1}{3}$

Simplify each expression.

35) $-7(8x - 1)$

36) $10 - 10(5x + 7)$

Write each as a fraction.

37) 78%

38) 20%

39) 7%

40) 50%

Solve each problem.

41) What is 169% of 79?

42) 95 is 27% of what?

Solve each proportion.

43) $\frac{n}{10} = \frac{3}{9}$

44) $\frac{v}{7} = \frac{2}{5}$

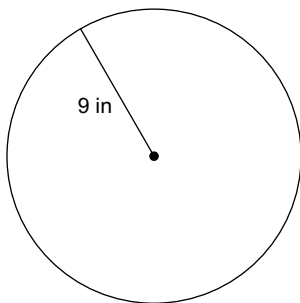
Answer each question and round your answer to the nearest whole number.

45) Norachai bought one package of strawberries for \$3. How many packages of strawberries can DeShawn buy if he has \$9?

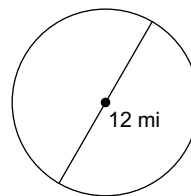
46) A frame is 1 in wide and 4 in tall. If it is enlarged to a width of 3 in, then how tall will it be?

Find the area and circumference of each. Round your answer to the nearest tenth.

47)



48)



Solve each equation.

1) $3n + 4n = -14$

2) $9 = -7m + 1 - 6$

3) $-24 = 5r + 3r$

4) $-6x - 6x = 12$

5) $-36 = 6(2 - 8n)$

6) $-6 + 5(-1 - b) = 19$

7) $-14 = -(-2x + 2)$

8) $51 = 7(-1 + 2v) + 2$

9) $7(1 + 5n) + 6(1 + 4n) = 13$

10) $73 = -6(k - 7) + 6(k + 5)$

11) $-6(3 - 3a) - 8(6a + 5) = 32$

12) $-9 + 4r = 4r - 3 - 6$

13) $6x - 2x + 8 = x + 5$

14) $4n + 5n + 15 = 5n + 7n$