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Algebra
Quiz 1
“Working with Signed Numbers”

1.) $-5(8) =$

2.) $7 - 15 =$

3.) $\frac{-28}{-4} =$

4.) $\frac{21}{-3} =$

5.) $-10 + 2 =$

6.) $-6 - (-2) =$

7.) $4(-3)(2) =$

8.) $\frac{-5(-4)}{-2} =$

9.) Which number is smaller: -2 or -8 ?

10.) On June 1, you owed \$195.80 on your credit card. During June you made the following transactions. What is your balance on July 1?

6/3	Charge \$27.50
6/11	Payment \$150.00
6/15	Charge \$59.18
6/20	Return \$34.24

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Algebra
Quiz 2
“Working with Formulas and Algebraic Expressions”

For problems 1 - 4, evaluate (calculate) the given expression.

1.) $\frac{35-3^2}{(10-6)^2} =$

2.) $\sqrt{\frac{5(6)^2}{3}} =$

3.) $21-2\sqrt{5} =$

4.) $\frac{4.4^3}{3} + 5 =$

5.) Evaluate $3x + 7$ when $x = -4$

6.) Evaluate $5x + 6(x + 1)$ when $x = 3$

7.) Evaluate $\frac{2(x+4)}{3(x-6)}$ when $x = 10$

8.) Evaluate $\sqrt{x^2 + y^2}$ when $x = 3$ and $y = 5$

9.) The simple interest formula is $I = PRT$. If you invest \$350 at 4.5% interest for 3 years, how much interest will you earn?

10.) Determine the diameter of a circle which has an area of 395 square feet. Use the formula:

$$d = \sqrt{\frac{4A}{\pi}}$$

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Quiz 3
“Solving and Writing Equations”

Solve each of the following equations.

1.) $x + 7 = 35$

2.) $10 = 3.5 + x$

3.) $y - 3 = 12$

4.) $x - 6.25 = 31$

5.) $7x = 126$

6.) $-2x = 48$

7.) $\frac{x}{7} = 4$

8.) $\frac{x}{-6} = 2.5$

9.) $\frac{3x}{2} = 10$

10.) $\frac{-5}{8}x = 4$

11.) You pay $\frac{1}{5}$ of your monthly salary on your mortgage payment which is \$600. What is your monthly salary?

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12.) $5x - 3 = 27$

13.) $10x + 6 - 2x = 30$

14.) $x + 8 = 4x - 7$

15.) $3(x + 4) = 45$

16.) $9x = 20 - 2(x - 3)$

17.) $17 - (10 - x) = 13$

18.) There are two numbers. The first is three times larger than the second. The sum of the two numbers is 68. What are the two numbers?

19.) An industry has three production lines A, B, and C producing the same items. Line A produces 150 more items per week than Line B and Line C produces 70 fewer items per week than Line B. The week's total production for all three lines was 2705 items. *How many items did each line produce?*

Line A = _____

Line B = _____

Line C = _____

20.) Steel that is 5% nickel and 95% iron is mixed with another batch that is 2% nickel and 98% iron to make 3 tons of steel that is 4% nickel and 96% iron. How many tons of each original batch was used?

21.) Solve for R in the equation... $I = MR^2$

22.) Solve for F in the equation... $C = \frac{5}{9} (F - 32)$

23.) Solve for e in the equation ... $M = \frac{PL}{ae}$