

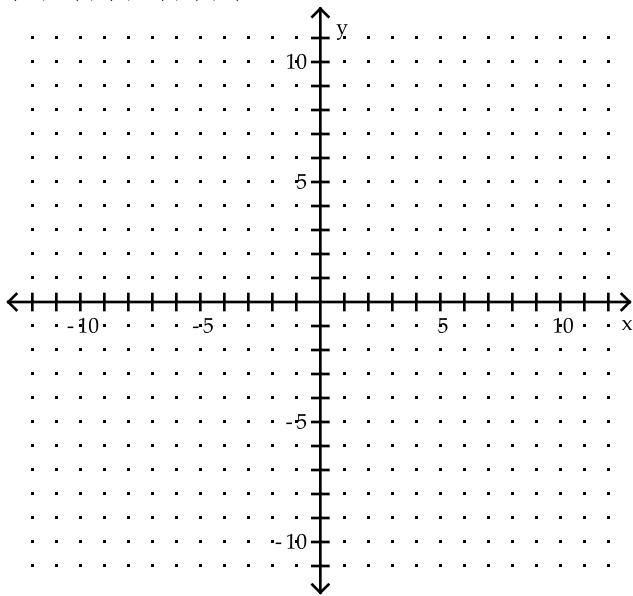
Math 055 Exam #2

Find the intercepts for the equation.

$-3x - 2 = 11 - 5(y + 1)$ Show all work.

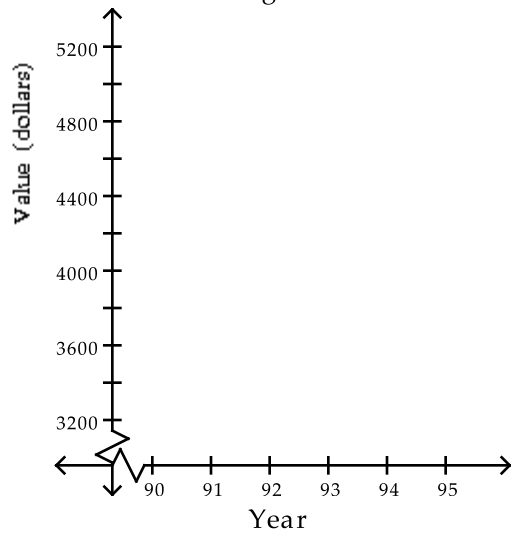
Plot the following points and find the area of the triangle that they define.

$(-3, -6)$, $(4, -6)$, $(1, 5)$ Show all work.



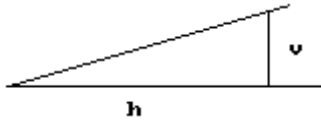
Use the graph to find the specified rate of change.

Find the rate of change in the value of Bob's car. Show all work.



Solve the problems. Show all work.

If the grade of the road shown is 60%, find the value for h if v = 3 ft.



Find the slope-intercept form of the equation of the line.

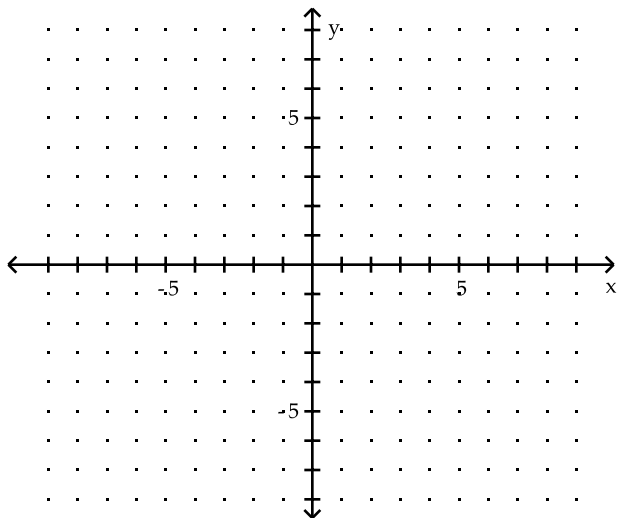
$Ax + By = 1$ Show all work.

Write the slope-intercept form of the equation of the line through the following points.

$(-3, -8)$ and $(0, 3)$ Show all work.

Graph the line.

$$y - 2 = -\frac{4}{8}(x + 3)$$



Write the equation of the line. Show all work.

Through (7, 5), perpendicular to $-7x - 9y = -94$

Solve the system by any method. Show all work.

$$3a - 5b = -10$$

$$2a + 2b = 10$$

Solve the system by any method. Show all work.

$$\frac{1}{5}(a - b) = 10$$

$$\frac{1}{4}(a + b) = -10$$

Solve the problems. Show all work.

Tim and Judy mix two kinds of feed for pedigreed dogs. They wish to make 36 pounds of feed worth \$0.44 per pound by mixing one kind worth \$0.25 per pound with another worth \$0.68 per pound. How many pounds of each kind of feed should they use in the mix?

Mardi received an inheritance of \$70,000. She invested part at 10% and deposited the remainder in tax-free bonds at 7%. Her total annual income from the investments was \$6,400. Find the amount invested at each of the rates.

Simplify: $(3x)^2(-2x^5)^3$

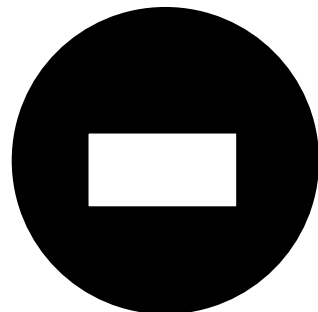
Simplify: $\left(\frac{x^2y^0}{y^{-2}z^3}\right)^{-2}$

Simplify: $\frac{A^{2k}(A^{3k})^2}{A^{-3k}}$

Perform the indicated operation: $(5x^3 + 3x - 7) - (2x^3 - 4x^2 - 3) + (x^2 - 2)$.

Perform the indicated operation: $(5x^2 - 6x)(2x^2 + 3x + 4)$.

Find the area of the shaded region if the radius of the circle is R, the length of the rectangle is L and the width of the rectangle is W.



Evaluate $\frac{5 - 2xy + y^6 - 4x^3y}{xy}$ when $x = 2$ and $y = -1$.

Perform the indicated operation: $(6x^3 + 3x^2 - x - 7) \div (2x + 3)$.

How long does it take a particle in space to travel 3.8×10^9 miles if its rate is 4.9×10^5 miles per hour? (Recall: Rate \times Time = Distance)

Multiply: $(2xy + 3z)^2$.

Perform the indicated operations: $(a - 3)^2(a + 3)^2$.