

Algebra 2

The purpose of this is to determine a student's readiness for Algebra 2 at HARC. Please have the student complete without parental assistance or the use of a calculator. Please have the student show their work!!

Name _____

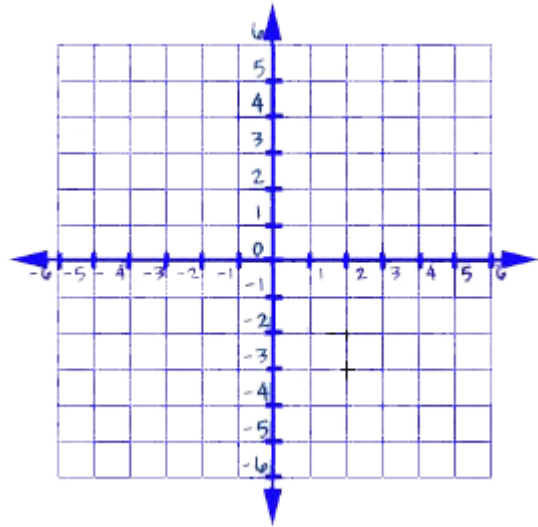
<p>1. Evaluate $x^2y - y^3$ if $x=3$ and $y=4$</p>	<p>2. Simplify: $\frac{-2-2(1-5)}{-2-3}$</p>
<p>3. Simplify and write the answer with all the variables in the numerator: $\frac{(xm^{-1})^{-3}x^2m^2}{(x^0y^2)^{-2}xy}$</p>	<p>4. Solve for x: $3\left(\frac{5}{6}-\frac{5}{3}x\right)=-\left(\frac{-1}{2}+x\right)$</p>
<p>5. The total value of pennies and nickels was \$14.50. Joel counted the coins and found there were 450 coins in all. How many of each type of coin did he have?</p>	<p>6. The scores achieved on 5 exams were 90, 70, 70, 85 and 95. Find the range, mean, median and mode of these 5 exams.</p>

7. Twice a number is decreased by 7, and this quantity is multiplied by 3. The result is 9 less than 10 times the number. What is the number?

8. Graph $y = 3x - 5$.
Indicate the slope and the y-intercept.

Slope:

Y-Intercept:



9. Solve by factoring:
 $x^2 - 15 = 2x$

10. Solve and graph the inequality:
 $\frac{1}{2}x \leq 8$