

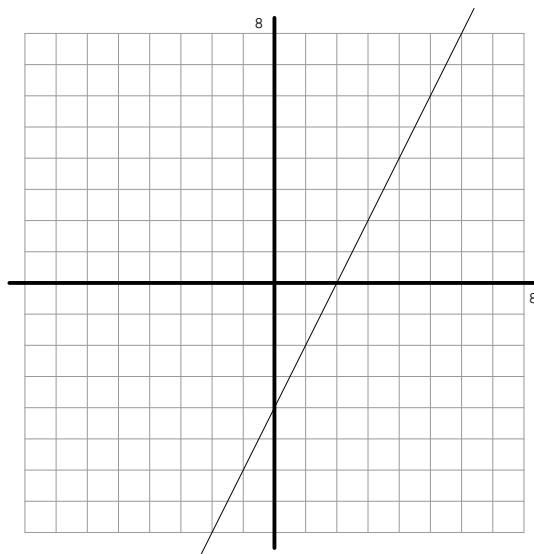
Quiz 2

MTH U121

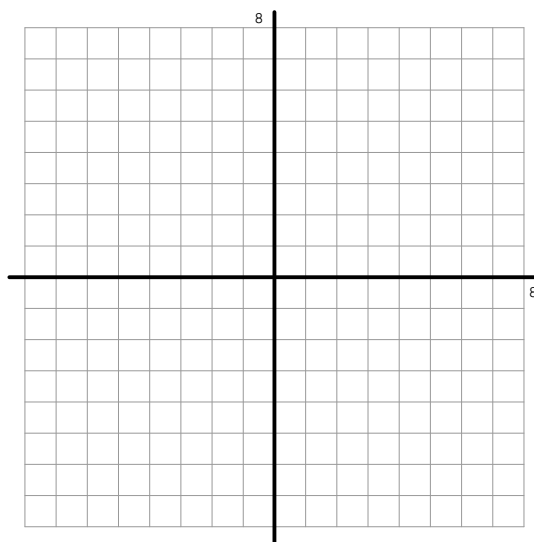
Page 1

_____ Name

1. Solve the following quadratic equation. Give the EXACT real solutions as well as a 4-decimal place approximation. $x^2 - 22x + 119 = 0$.
2. Solve for x : $\frac{35}{x-2} - \frac{32}{x-1} = 1$.
3. The variable s is directly proportional to the fifth root of the variable x and inversely proportional to the square of the variable y . When x has a value of 1,024 and y has a value of 10 then s has a value of 40. Find the value of s when x has a value of 32 and y has a value of 5.
4. Here is the graph of a linear function. Find the function in the form $y = mx + b$.



5. Get the equation and sketch the graph of the straight line which passes through the point $(-1, 0)$ and has slope $\frac{2}{5}$.



ANS: 1: $11 \pm \sqrt{2} = 9.586, 12.41$; 2: $\{-3, 9\}$; 3: $k = 1,000, s = 80$; 4: $y = 2x - 4$; 5: $y = \frac{2x}{5} + \frac{2}{5}$;

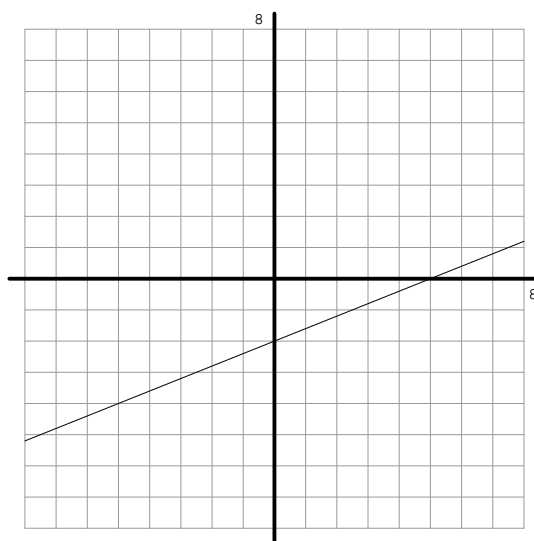
Quiz 2

6. Solve the following quadratic equation. Give the EXACT real solutions as well as a 4-decimal place approximation. $x^2 + 8x + 14 = 0$.

7. Solve for x : $\frac{21}{x+1} - \frac{105}{x-7} = 4$.

8. The variable s is directly proportional to the fifth root of the variable x and inversely proportional to the cube of the variable y . When x has a value of 759,375 and y has a value of 6 then s has a value of 285. Find the value of s when x has a value of 243 and y has a value of 3.

9. Here is the graph of a linear function. Find the function in the form $y = mx + b$.



10. Get the equation and sketch the graph of the straight line which passes through the point $(-1, -3)$ and has slope $-\frac{4}{5}$

