Strand 1   **Functions**

1. If b = -2 , the value of $b^2 - 2$ is

   A.   2   B.   -11   C. 7   D. 9

2. Which of the relations below is a function?

   A. { (0,0),(1,1),(2,2),(2,3)}   B. {(2,1), (2,2), (2,3),(2,4)
   C. { (0,2),(0,3),(0,4),(0,5) }   D. { (1,1),(2,1),(3,1),(4,1) }

3. Which ordered pair represents f(-4) = 3

   A. (-4,3)   B. (-3,4)   C. (3,-4)   D. (4,-3)

4. The coordinates of the x – intercept of line *k* given below are
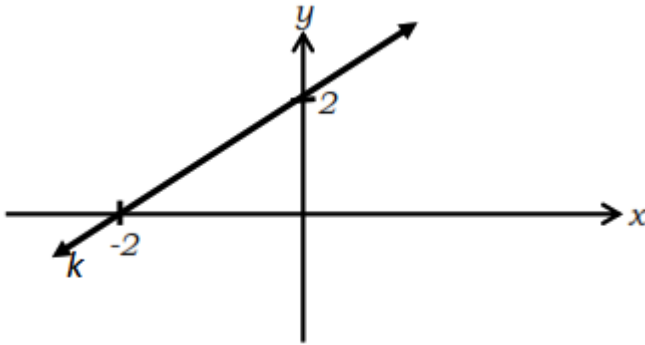
      A. (0, 2)   B. (0, -2)   C. (-2, 0)   D. (2, 0)

5. The solution set for -2x < 4 is best given by

   A. x < -2   B. x < 2   C. x > -2   D. x > 2

6. A relation is given as {(−1,0), (1,3)}.The domain of the relation is

   A.{−1 , 3 }   B. { 1 , 3 }   C. {−1 , 1 }   D. {1 , 1 }

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7. A quadratic function has the highest degree as:

   A.1   B. 2   C. 3   D. 4

8. The equation of a line is given as $y = 4x + 5$, what is the gradient of this line?

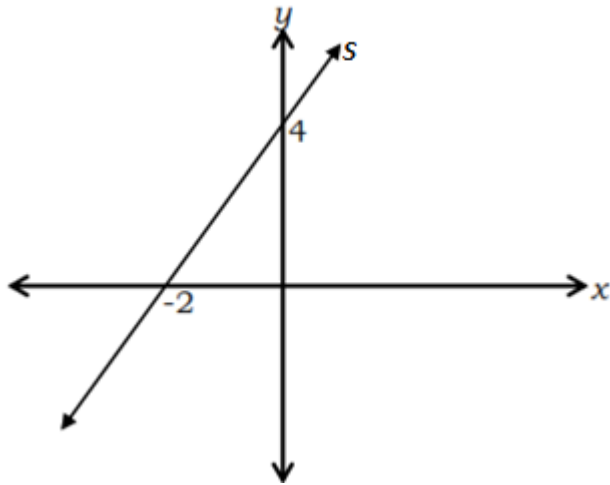   A. 4   B. $-4x$ C. -5 D. -4

9. An ordered pair is represented by
   A. (Input, Output)
   B. (Input, Input)
   C. (Output, Input)
   D. (Output, Output)

10. A line l passes through the points (-2, 0) and (0, 4).

    (a)   Draw line l on the Cartesian plane
    (b)   Calculate the gradient of line p .
11. Line s is qiven below.

    (a) Find the coordinates of the y- intercept. (____, ____)
    (b) Find its gradient.
    (c)Determine the equation of Line.

12. What is the y-intercept of the equation $y=5x+5$?