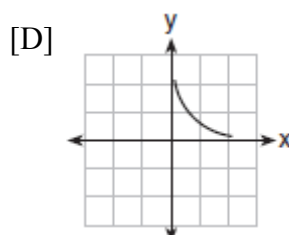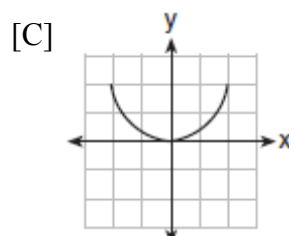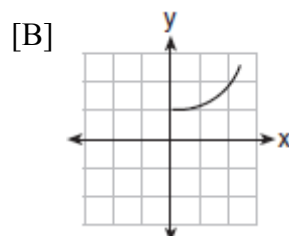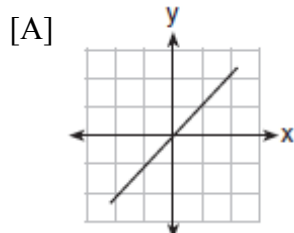NAME:_____

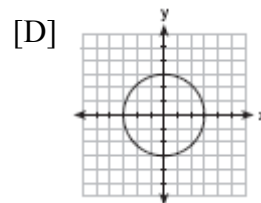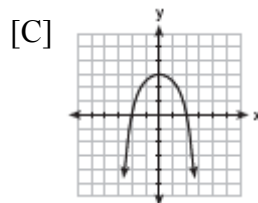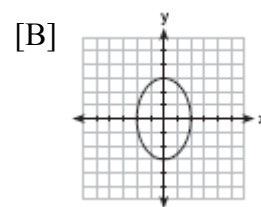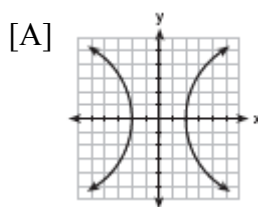*A2.A.52: Identify relations and functions, using graphs*

1. 080913b, P.I. A2.A.52

    Jack is driving from New York to Florida. The number of hours that he drives and the speed at which he drives are inversely proportional. Which graph could be used to describe this situation if one axis represents speed and the other represents hours?
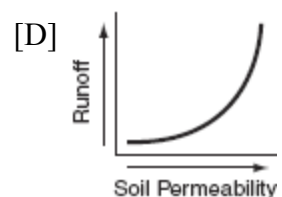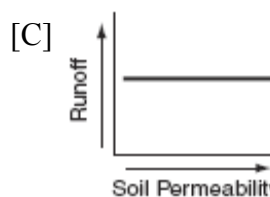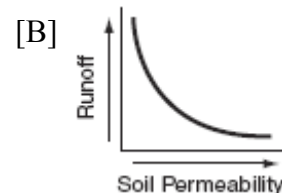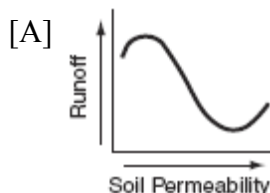
    [A]

    [B]

    [C]

    [D]

2. 010917b, P.I. A2.A.52

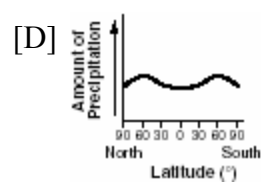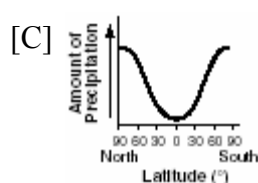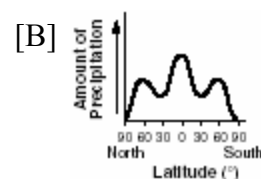   Which graph represents the equation $9x^2 = 36 - 4y^2$?

    [A]   [B]

    [C]   [D]
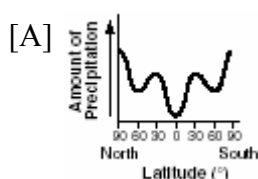
3. 010603b, P.I. A2.A.52

    Which graph shows that soil permeability varies inversely to runoff?

    [A]   [B]

    [C]   [D]
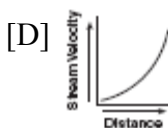
4. 080503b, P.I. A2.A.52
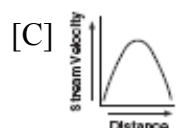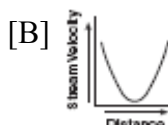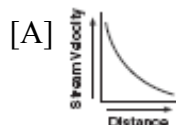
    The graphs below show the average annual precipitation received at different latitudes on Earth. Which graph is a translated cosine curve?

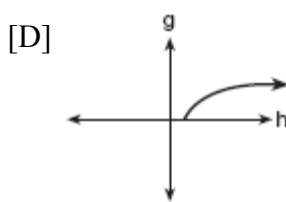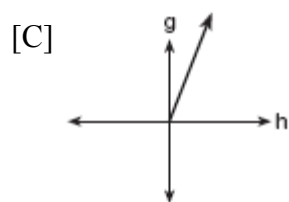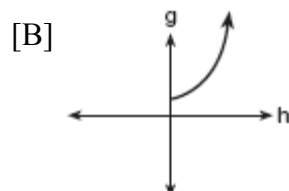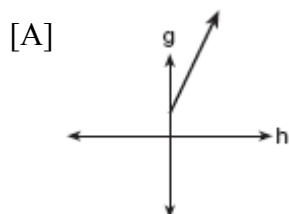   [A]   [B]

    [C]   [D]

5. 060408b, P.I. A2.A.52
    Which graph represents an inverse variation
    between stream velocity and the distance
    from the center of the stream?

    [A]   [B]

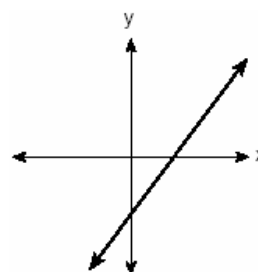   [C]   [D]

6. 010420b, P.I.A2.A.52
    The cells of a particular organism increase
    logarithmically. If g represents cell growth
    and h represents time, in hours, which graph
    best represents the growth pattern of the cells
    of this organism?
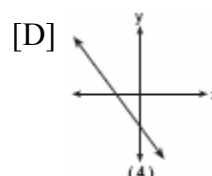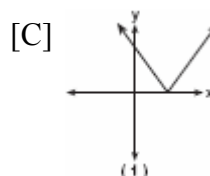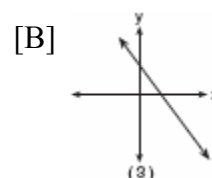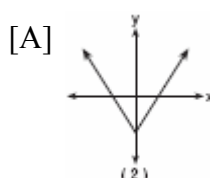
    [A]

    [B]

    [C]   [D]

7. 010414b, P.I. A2.A.52
    The graph below represents $f(x)$.

    Which graph best represents $|f(x)|$?

    [A]   [B]

        (2)   (3)
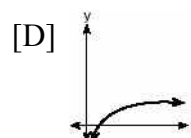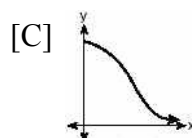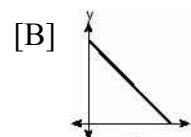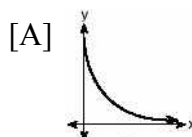
    [C]   [D]

        (1)   (4)

8. 080304b, P.I. A2.A.52
    The strength of a medication over time is
    represented by the equation $y = 200(1.5)^{-x}$,
    where x represents the number of hours since
    the medication was taken and y represents the
    number of micrograms per millimeter left in
    the blood. Which graph best represents this
    relationship?

    [A]   [B]

    [C]   [D]

A2.A.52: Identify relations and functions, using graphs

[1] D

[2] B

[3] B

[4] C

[5] A

[6] D

[7] C

[8] A