Practice Questions for the 2019 Decathlon
Math: (High School)

1.   Samantha drew $\triangle JKL$ with vertices (2, 3), (4, 3), and (5, 2). She reflected this triangle over the x-axis to create an image. What are the coordinates of the vertices of the image?

    a.   (0, 3), (2, 3), and (3, 2)
    b.   (2, 0), (4, 0), and (5, –1)
    c.   (–2, 3), (–4, 3), and (–5, 2)
    d.   (2, –3), (4, –3), and (5, –2)

2.   Which decimal is equivalent to $\dfrac{7}{15}$?

    a. $0.\overline{46}$
    b. $0.4\overline{6}$
    c. $0.\overline{46}$
    d. $0.\overline{467}$

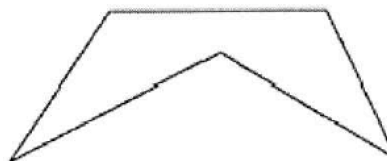3.   Which is the solution of the equation $4(x+2)+x+1 = 2x-3+3(x+4)$?

    a.   –1
    b.   1
    c.   no solution
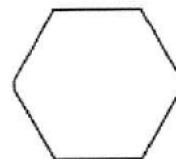   d.   infinite solutions

5.   Which polygon is a concave hexagon?
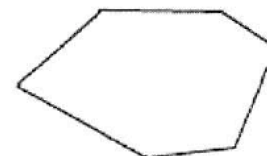
    a.

    b.

    c.

    d.

4. Which of the following is not a parallelogram?

a. rhombus
b. kite
c. square
d. rectangle