Worksheet 14

Creating Static Methods to Convert units of length

Create a program which accept a length in km, i.e. kilometers.   Convert and output to the console the same length in:

- Feet
- Yards
- Miles

Formulae:

- (1 **Kilometer** (**km**) is equal to 3280.839895 **feet** (**ft**). To **convert kilometers to feet**, multiply the **kilometer** value by 3280.839895.)
- There are 3 feet in one yard.
- To **convert** from **kilometers** into **miles**, multiply the distance in **kilometers** by 0.6214

Use this exact MAIN program and write the three conversion methods which are used in the main program. Remember to document your 3 static methods for Javadoc.

```java
public static void main(String[] args)
{ //main

    double kilos = 0.0;
    Scanner keybd = new Scanner(System.in);

    System.out.print("How many kilometers is your walk to school? (e.g. 3.1) > ");
    kilos = keybd.nextDouble();

    System.out.println("");
    System.out.println("that works out to: " + km_to_feet(kilos) + " feet");
    System.out.println("that works out to: " + km_to_yards(kilos) + " yards");
    System.out.println("that works out to: " + km_to_miles(kilos) + " miles");

} //main
```

Make your program output EXACTLY as shown in the sample session below.

Sample Session

```
How many kilometers is your walk to school? (e.g. 3.1) > 10

that works out to: 32808.39895 feet
that works out to: 98425.19685000001 yards
that works out to: 6.213999999999995 miles
```