1. Write an D minor scale (natural form) using accidentals. Label the whole and half steps.

\[
\begin{array}{ccccccc}
W & H & W & W & H & W & W \\
\end{array}
\]

2. Write the requested scales using only accidentals and then using a correct key signature.

Using accidentals  
Using a key signature

(a.)  

\[
\begin{array}{ccccccc}
\# & \# & \# & \# & \# & \# & \# \\
\end{array}
\]

E min (melodic ascending only):

(b.)  

\[
\begin{array}{ccccccc}
\# & \# & \# & \# & \# & \# & \# \\
\end{array}
\]

F min (natural):

(c.)  

\[
\begin{array}{ccccccc}
\# & \# & \# & \# & \# & \# & \# \\
\end{array}
\]

F# min (harmonic):

(d.)  

\[
\begin{array}{ccccccc}
\times & \times & \times & \times & \times & \times & \times \\
\end{array}
\]

G# min (melodic ascending only):

3. Identify the minor scales that the following fragments could be a part of. There might be more than one answer.

These questions are a little more complicated for minor scales, since we have to consider that accidentals could be either part of the key signature or a raised 6 or 7, implying harmonic or melodic scales.

(a.)  

D natural minor or F melodic minor. The B implies at least 1 flat in the signature. The E is natural. That makes D minor possible. But the E might also be a raised 6 or 7. It couldn’t be a raised 6 without F#. But it could be a raised 7. The D# would then be a raised 6, and the scale could be F melodic minor.

(b.)  

G melodic minor. We know Bb has to be part of the key signature. The Bb along with Eb might possibly imply D minor (1 flat), as in the previous example. But the F# can only be a raised 7. So the only possibility is G melodic min.
4. Identify the following scales. Assume they end on tonic. Remember the scale is determined by the actual pitches in the scale, not the key signature. Be sure to indicate the form of the minor scale.

   a. 
   ![E harmonic minor](image1)
   
   **E harmonic minor**  Notice in this example the lowered 6 and raised 7 of harmonic minor is camouflaged by the combination of key signature and accidentals. Remember, what matters is the notes that are actually sounding, not how they are written.

   b. 
   ![Bb natural minor](image2)
   
   **Bb natural minor**  The Gb would simply be the next flat of the key signature.

5. Identify the key of the melody. Remember, key is based on how the music *sounds*, not on what key signature is used. These exercises don’t always end on tonic. Look at the whole melody and decide what scale is being used, what accidentals might imply leading tones, and what tone would sound like tonic. After you have worked out an answer, play the melody on a keyboard to confirm our answer.

   a. 
   ![C minor](image3)
   
   **C minor.**  The A♭ is 6 in the natural scale, and would normally be part of the C minor key signature. The B♭ is a leading tone (raised 7).

   b. 
   ![E minor](image4)
   
   **E minor.**  F♯ is part of the natural scale, and D♯ is a leading tone (raised 7).