DETERMINING GRADIENTS WORKSHEET
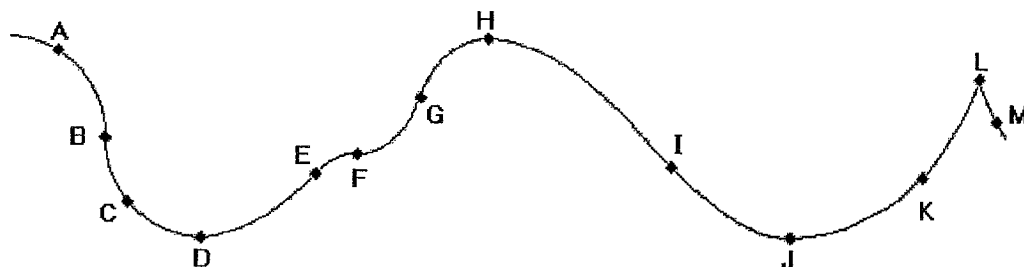
Study the gradients at each of the points labelled in this diagram and answer the questions below:

(1) At which points does the gradient not exist?...

(2) At which points is the gradient zero? ....

(3) At which points is the gradient positive?...

(4) At which points is the gradient negative?..

(5) Which points are stationary points?..

(6) At which points is there a local maximum? ....

(7) At which points is there a local minimum? ....

(8) At which points is there a point of inflexion? ....

(9) At which points is there a horizontal point of inflexion?..

(10) Between which points is the curvature negative? ....