Beverly Hills High School -- FST Trig -- Test #4 -- Graphing Trig Functions -- 80 points

READ THE INSTRUCTIONS: For each of the following trigonometric functions, state in list order,

- A) its amplitude C) its phase shift (if zero, say so)
- B) its period D) its vertical shift (if zero, say so)

Then graph it on the graph paper provided. Write each equation on the graph paper in the space provided. Show at least TWO full periods for each function. BE SURE to label all axes properly and completely. Eight points each:

1) $y = 1 - \cos 2\theta$ 2) $y = 3 \csc \theta - 2$

3)
$$y = \frac{1}{2}\sin 4\pi x$$
 4) $y = 2 + \frac{1}{2}\sec(\theta - 135^\circ)$

5)
$$y = -2 \tan \left(2x - \frac{5\pi}{3}\right) + 1$$
 6) $y = \cos \left(\frac{1}{4}x + 37.5^\circ\right) + 3$

For each of thre following graphs of trigonometric functions, state in list order,

- A) its amplitudeB) its period
- C) its phase shift (if zero, say so)
- D) its vertical shift (if zero, say so)

Then provide a valid equation that describes it. Use the provided function for each. Eight points here too.



