

# Cusp Mini Worksheet

2. (a) Not continuous or differentiable at  $x=0$
- (b) Not continuous or differentiable at  $x=0$   
continuous, but not differentiable at  $x=3$
- (c) continuous, but not differentiable at  $x=1$
3. (a) discontinuity  
(b) corner  
(c) discontinuity  
(d) cusp  
(e) vertical tangent  
(f) vertical tangent
4. (a) Discontinuous  
(b) Discontinuous  
(c) cusp  
(d) corner  
(e) Discontinuous  
(f) vertical tangent  
(g) vertical tangent  
(h) Discontinuous
5. (a) NO  $\rightarrow$  Discontinuous  
(b) NO  $\rightarrow$  Discontinuous  
(c) yes  
(d) NO  $\rightarrow$  sharp turn/corner