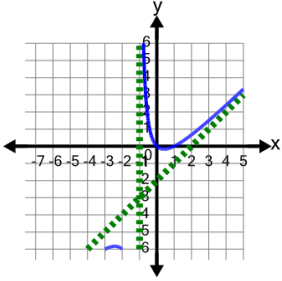




## Rational Functions and Asymptotes - Graph to Asymptotes



1 What are the asymptotes of this graph?



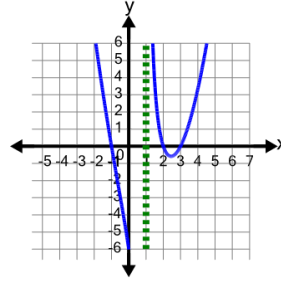
A Horizontal asymptote at  $y = -5$

B Vertical asymptote at  $x = -2$   
Horizontal asymptote at  $y = \frac{1}{3}$

C Horizontal asymptote at  $y = 0$

D Vertical asymptote at  $x = -1$   
Slant asymptote at  $y = x - 2$

2 What are the asymptotes of this graph?



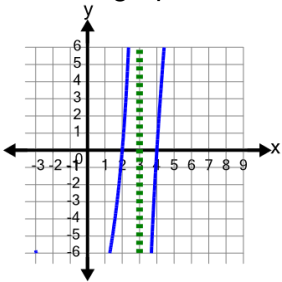
A Vertical asymptote at  $x = 0$   
Horizontal asymptote at  $y = \frac{2}{3}$

B Vertical asymptote at  $x = 1$   
No horizontal or slant asymptote

C Vertical asymptote at  $x = 3$   
No horizontal or slant asymptote

D Vertical asymptote at  $x = -4$   
Slant asymptote at  $y = x - 3$

3 What are the asymptotes of this graph?



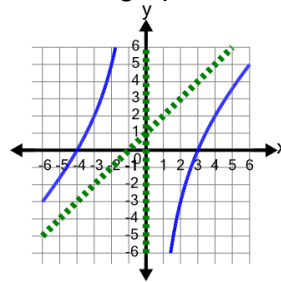
A Slant asymptote at  $y = 2x + 4$

B Vertical asymptote at  $x = -2$   
No horizontal or slant asymptote

C Horizontal asymptote at  $y = -5$

D Vertical asymptote at  $x = 3$   
No horizontal or slant asymptote

4 What are the asymptotes of this graph?



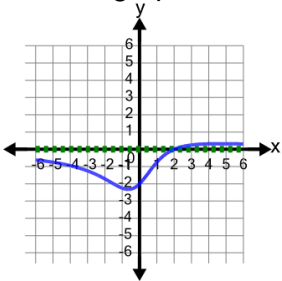
A Vertical asymptote at  $x = 2$   
Horizontal asymptote at  $y = \frac{4}{5}$

B Horizontal asymptote at  $y = 4$

C Vertical asymptote at  $x = 0$   
Slant asymptote at  $y = x + 1$

D Vertical asymptote at  $x = 3$   
Horizontal asymptote at  $y = \frac{5}{3}$

5 What are the asymptotes of this graph?



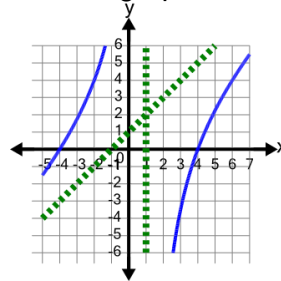
A Horizontal asymptote at  $y = 0$

B Slant asymptote at  $y = 2x + 10$

C Vertical asymptote at  $x = -4$   
Horizontal asymptote at  $y = 1$

D Vertical asymptote at  $x = -2$   
Slant asymptote at  $y = x - 6$

6 What are the asymptotes of this graph?



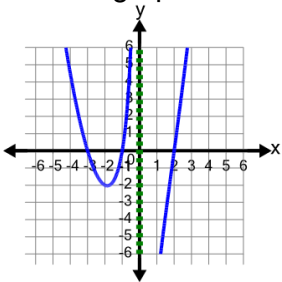
A Vertical asymptote at  $x = 1$   
Slant asymptote at  $y = x + 1$

B Slant asymptote at  $y = x + 4$

C Vertical asymptote at  $x = 4$   
No horizontal or slant asymptote

D Vertical asymptote at  $x = 3$   
Slant asymptote at  $y = x + 3$

7 What are the asymptotes of this graph?



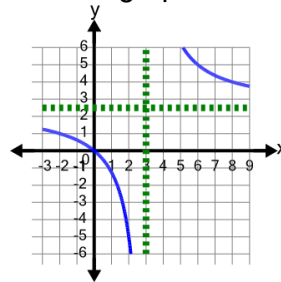
A Slant asymptote at  $y = x - 1$

B Vertical asymptote at  $x = 0$   
No horizontal or slant asymptote

C Vertical asymptote at  $x = -1$   
Horizontal asymptote at  $y = 1$

D Horizontal asymptote at  $y = 0$

8 What are the asymptotes of this graph?



A Vertical asymptote at  $x = -4$   
Horizontal asymptote at  $y = \frac{1}{3}$

B Vertical asymptote at  $x = 2$   
Horizontal asymptote at  $y = \frac{1}{2}$

C Vertical asymptote at  $x = -1$   
Slant asymptote at  $y = x - 8$

D Vertical asymptote at  $x = 3$   
Horizontal asymptote at  $y = \frac{5}{2}$