

Asymptotes;

In general, the procedure for asymptotes is the following:

- set the denominator equal to zero and solve
 - the zeroes (if any) are the vertical asymptotes
 - everything else is the domain
- compare the degrees of the numerator and the denominator
 - if the degrees are the same, then you have a horizontal asymptote at $y = (\text{numerator's leading coefficient}) / (\text{denominator's leading coefficient})$
 - if the denominator's degree is greater (by any margin), then you have a horizontal asymptote at $y = 0$ (the x -axis)
 - if the numerator's degree is greater (by a margin of 1), then you have a slant asymptote which you will find by doing long division

When you're working these problems, try to go through these steps in order, so you can remember them on the test. They're not so hard once you get the hang of them, so be sure to do plenty of practice exercises.