Pre-Calculus 12B Exam Review Solutions

**SHORT RESPONSE:**

1. 
2. must end with 5, 7 or 9 to be odd 
3. 
4. 
5. 
6. 
7. 
8. 

Domain:  Range: 

1. ?

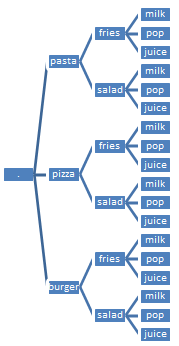
Domain:  Range: 

1. 
2. 

1.  
2. vertical asymptotes: x=2 horizontal asymptote:
3. 
4. 
5. 
6. 
7.  {4, 4x3=12, 12x3=36, 108, …}
8. 
9. 

**OPEN RESPONSE:**

1. There are 3x2x3 = 18 possible lunch combinations



1. a) 1 9 36 84 126 126 84 36 9 1

b) 1 10 45 120

1. Permutation 6!=720
2. Combination 
3. a) 

b) 

1. a)



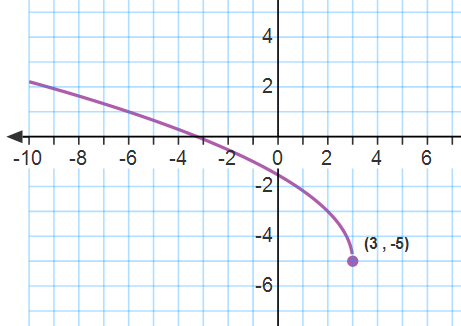
b)



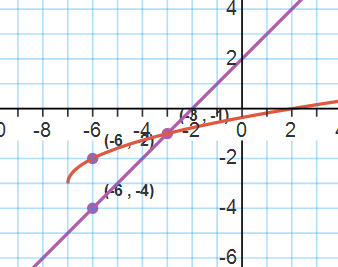
c)



x-intercept: y-intercept: Domain:  Range: 

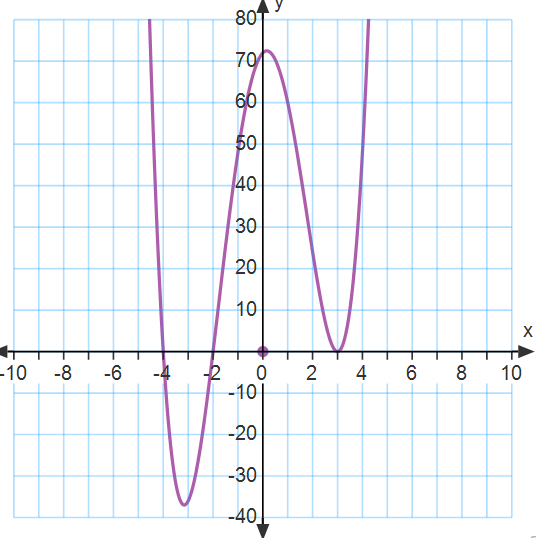


1. 1. 
   2. 
   3. 
   4. Requires synthetic or long division.



1. 
2. Factor completely: 

b) x-intercepts: x=-4, -2, 3, 3

c) y-intercept: y=72

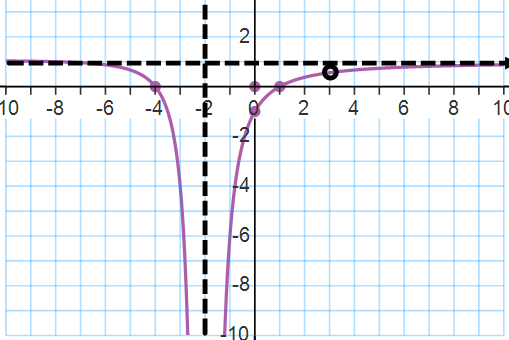
d) sketch of the graph shown to the right

e) positive: 

f) negative: 

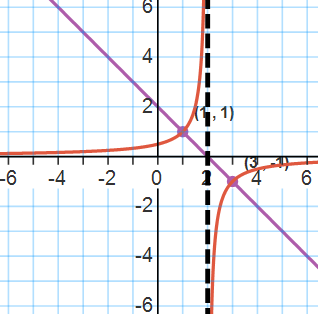
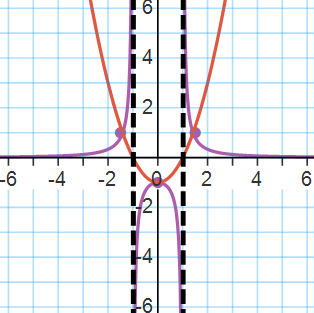
1. Requires synthetic or long division. 



1. PoD: 
2. x-intercept(s): x=-4, 1
3. Vertical Asymptote(s): x=-2, -2
4. y-intercept: y=-1
5. Horizontal Asymptote(s): y=1
6. Domain: 



1. 
2. b)

* 1. 
  2. 
  3. 
  4. 
  5. 
  6. 
  7. 
  8. 
  9. 
  10. 

1. Given the graph of f(x), find the following limits:
   1.  
   2. 
   3. 
   4. 
   5. 
   6. 



* 1. arithmetic:

   {-9, -3, 3, 9, 15, 21, 27, …}

* 1. geometric:

   {3/2, 3, 6, 12, 24, 48, …}

* 1. 2 + 7 + 12 + … + 57

* 1. 35 + 32 + 29 + … + (−4)

* 1. 1 + 3 + 9 + 27 + … + 6561

* 1.  



1. There are 2 patterns here, the first eight rows and the last eight rows.

first eight rows

Last eight rows

Therefore the total number of seats is 180+444=624 seats.

Or expand the series: 12+15+18+21+24+27+30+33+38+43+48+53+58+63+68+73=624 seats

* 1.  







