

Math 3201
Homework Booklet
Ch. 5

Name _____

Section 5.1

1 a, p. 277

1 b, p. 277

1 c, p. 277

1 d, p. 277

1 e, p. 277

1 f, p. 277

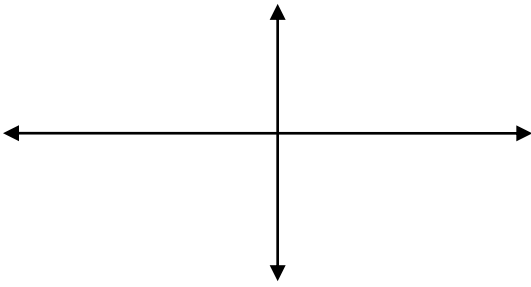
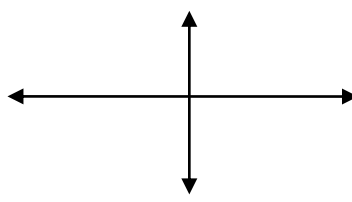
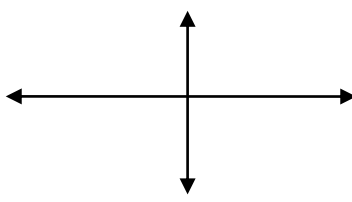
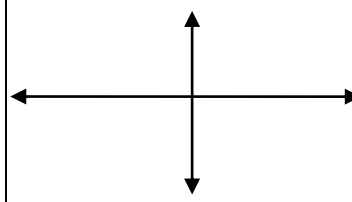
2 b, c, d, p. 277

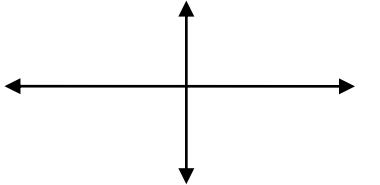
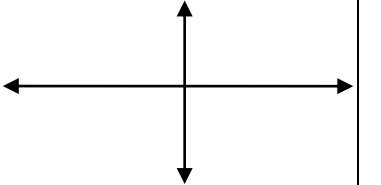
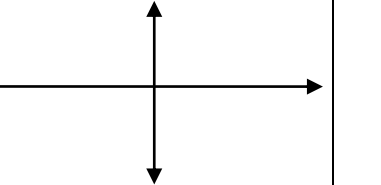
Graph	x-intercept(s)	y-intercept	End Behaviour	Domain	Range	# Turning Points
2 b)						
2 c)						
2 d)						

3 a-f, p. 277

Function	# x-ints.	y-int.	End Behaviour	Domain	Range	# Turning Pts.
$f(x) = 3x - 1$	1					
$f(x) = x^2 + 4$		(0,4)				
$f(x) = -2x^3 - 5x + 3$			Q2 to Q4			
$f(x) = 5x^3$				$\{x x \in \mathbb{R}\}$		
$f(x) = -3$					$\{y y \in \mathbb{R}\}$	
$f(x) = -(x+3)^2 + 2$						1

4 a-c, p. 277

Function			
4 a (Linear)			
4 b (Quadratic)			

4 c (Cubic)			
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Section 5.2

1 a-d, p. 287

Function	Degree	Leading Coefficient	Constant Term
$f(x) = 6x^2 - 3x - 2$			
$g(x) = -\frac{2}{3}x + 10$			
$h(x) = -x^3 + 10x^2 + 6$			
$j(x) = 4x^3 - 2x^2 - 3x - 10$			

2 i-iii, p. 287

Function	# <i>x</i> - ints.	End Behaviour	Domain	Range	# T.P.
$f(x) = 6x^2 - 3x - 2$	2				
$g(x) = -\frac{2}{3}x + 10$					
$h(x) = -x^3 + 10x^2 + 6$					
$j(x) = 4x^3 - 2x^2 - 3x - 10$					

3, p. 287

Graph	Degree	Sign of Leading Coefficient	Constant Term
a)			
b)			
c)			
d)			

4 a, p. 287

4 b, p. 287

4 c, p. 287

4 d, p. 287

5, p. 288

Function	End Behaviour
a)	Increases to the right, decreases to the left. Q3 to Q1.
b)	
c)	
d)	
e)	
f)	

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Graph	Matching Equation
a)	
b)	
c)	
d)	
e)	
f)	

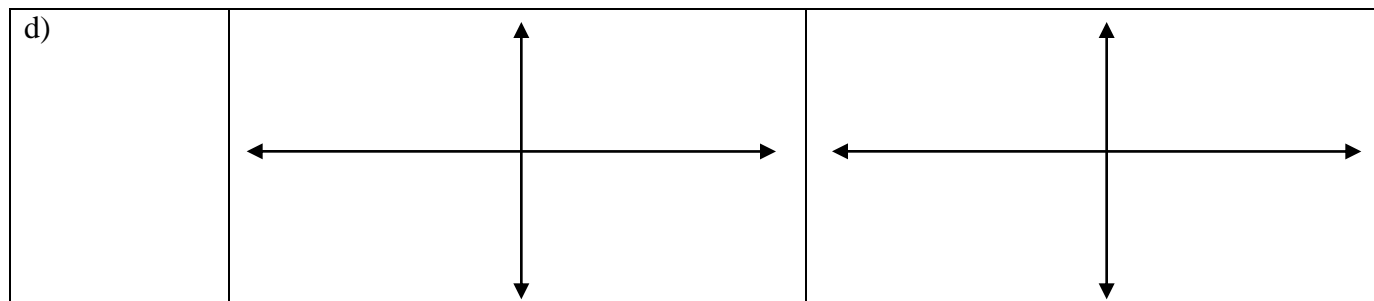
7, p. 288

Function	# <i>x</i> -ints.	<i>y</i> -int.	End Behaviour	Domain	Range	# T.P.
a)						
b)	0,1,2					
c)						
d)						

9, p. 289

10, p. 289

Characteristics	Sketch 1	Sketch 2
a)		
b)		
c)		



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Graph	Matching Equation
a)	
b)	
c)	
d)	

Section 5.3

4 a, p. 302

4 b, p. 302

4 c, p. 302

4 d, p. 302

7 a, p. 303

7 b, p. 303

7 c, p. 303

7 d, p. 303

10, p. 304

12, p. 305

Section 5.4

1 a, p. 313

1 b, p. 313

1 c, p. 313

1 d, p. 313

6, p. 314

9 a, p. 315

9 b, p. 315

10 a, p. 316

10 b, p. 316

10 c, p. 316

Practising

1, p. 321

2, p. 321

Function	# x -ints.	y -int.	Domain	Range	No. Turn. Pts.
a)					
b)					
c)					
d)					

3, p. 321

Function	y -int.	End Behaviour	Domain	Range
a)				
b)				

4, p. 321

Function	# x -ints.	y -int.	End Behaviour	Domain	Range	No. Turn. Pts.
a)						
b)						

5 a, p. 321

5 b, p. 321

6 a, p. 321

6 b, p. 321

6 c, p. 321

8 a, p. 322

8 b, p. 322

8 c, p. 322

9 a, p. 322

9 b, p. 322