

**Section 6.1**

1 a, p. 337

1 b, p. 337

1 c, p. 337

1 d, p. 337

1 e, p. 337

1 f, p. 337

2, p. 337

#1	# x-int.	y-int.	End Behaviour	Domain	Range
b					
e					

3 a-d, p. 337

#3	# x-int.	y-int.	End Behaviour	Domain	Range
$y = 10(2)^x$					
$y = 6(2)^x$					
$y = 27\left(\frac{1}{3}\right)^x$					
$y = 4\left(\frac{1}{2}\right)^x$					

## Section 6.2

2 a-d, p. 347

	# $x$ -ints.	$y$ -int.	End Behaviour	Domain	Range
a					
b					
c					
d					

4 a-d, p. 347

	$y$ -int.	Increasing or Decreasing?
$y = 5(2)^x$		
$y = 2\left(\frac{1}{2}\right)^x$		
$y = 10(1.5)^x$		
$y = 0.4^x$		

5 i) a-d, p. 347

	Exponential Function? (Y or N) & Explain
a	
b	
c	
d	

6 a-f, p. 348

Exponential Function	# $x$ -ints.	$y$ -int.	End Behaviour	Domain	Range
$y = 3(5)^x$					
$y = 4(0.3)^x$					
$y = 2\left(\frac{1}{5}\right)^x$					
$y = 3.5\left(\frac{1}{8}\right)^x$					

$y = 25(1.7)^x$					
$y = 12(0.8)^x$					

7 a-c, p. 348

	Base	Increasing or Decreasing? & Explain
$y = \frac{1}{3}(8)^x$		
$y = 4\left(\frac{3}{5}\right)^x$		
$y = 0.5(e)^x$		

9 a-d, p. 348

	Base	Increasing or Decreasing? & Explain
$f(x) = 7\left(\frac{2}{3}\right)^x$		
$g(x) = 0.6(2.5)^x$		
$h(x) = 0.4(0.5)^x$		
$h(x) = 5(2)^x$		

11 a-d, p. 349

Exponential Function	Increasing or Decreasing?	Corresponding Graph
$y = 6(1.5)^x$		
$y = 4(0.25)^x$		
$y = 2(0.1)^x$		
$y = 3(1.15)^x$		

13 a-b, p. 349

Exponential Function	Range	Value of $a$	Value of $b$	Increasing or Decreasing?	Corresponding Graph
$y = 2(0.5)^x$	$\{y \mid y > 0\}$	2	0.5	Decreasing	B
$y = 1(3)^x$					
$y = 3\left(\frac{1}{2}\right)^x$					
$y = 2(4)^x$					

14 a, p. 350

18 a, p. 350

Graph	y-intercept	Domain	Range
Student A			
Student B			

18 b, p. 350

18 c, p. 350

18 d, p. 350

18 e, p. 350

**Section 6.3**

2 a, p. 361

2 b, p. 361

2 c, p. 361

2 d, p. 361

4 a, p. 362

4 b, p. 362

4 c, p. 362

4 d, p. 362

4 e, p. 362

4 f, p. 362

5 a, p. 362

5 b, p. 362

5 c, p. 362

7 a, p. 362

7 b, p. 362

7 c, p. 362

7 d, p. 362

7 e, p. 362



7 f, p. 362

8 a, p. 363

8 b, p. 363

8 c, p. 363

8 d, p. 363

10 a, p. 363

10 b, p. 363

10 c, p. 363

12 a, p. 364

12 b, p. 364

16 a, p. 365

15, p. 365

11 a, p. 363

11 b, p. 363

11 c, p. 363

14 a, p. 364

14 b, p. 364

**Section 6.4**

1 a, p. 377

1 b, p. 377

1 c, p. 377

1 d, p. 377

2 a, p. 377

2 b, p. 377

4 a, p. 378  
4 b, p. 378

4 c, p. 378

4 d, p. 378

5 a, p. 378  
5 b, p. 378

5 c, p. 378

5 d, p. 378



10 a, p. 380

10 c, p. 380

10 d, p. 380

15 a i), p. 382

15 a ii), p. 382

15 b, p. 382

15 c, p. 382

**Section 6.5**

1 A. a, p. 395

1 A. b, p. 395

1 A. c, p. 395

1 A. d, p. 395

1 B. a, p. 395

1 B. b, p. 395

1 B. c, p. 395

1 B. d, p. 395

5 a, p. 396

5 b, p. 396

7 a, p. 396

7 b, p. 396

7 c, p. 396

4, p. 395

8 a, p. 396

8 b, p. 396

8 c, p. 396

2 c, p. 395

14, p. 397

**Practising**  
1 b, p. 402

2 a, p. 402

2 b, p. 402

3 a & d, p. 402

Exponential Function	No. $x$ -ints.	$y$ -int.	End Behaviour.	Domain	Range	Increases or Decreases?
$y = 125(0.78)^x$						
$y = 0.85(5)^x$						

5, p. 402

6 a, pp. 402

6 b, pp. 402

6 c, pp. 402

8 a, pp. 403

8 b, pp. 403

8 c, pp. 403

8 d, pp. 403

12 a, pp. 404

12 b, pp. 404

13 a, pp. 404

13 b, pp. 404

14 a, pp. 404

14 b i), pp. 404

14 b ii), pp. 404



14 c, pp. 404

15, p. 404

17 a, pp. 404

17 b, pp. 404

18 a, pp. 404

18 b, pp. 404

18 c, pp. 404