

# Chapter 7

# ANSWER SHEET

## 7-1a

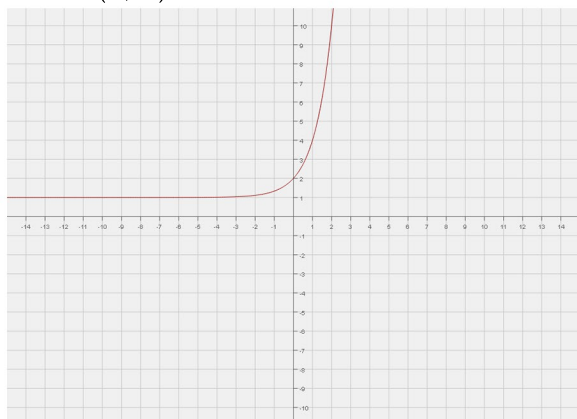
1)  $D: (-\infty, \infty)$   
 $R: (-\infty, 0)$



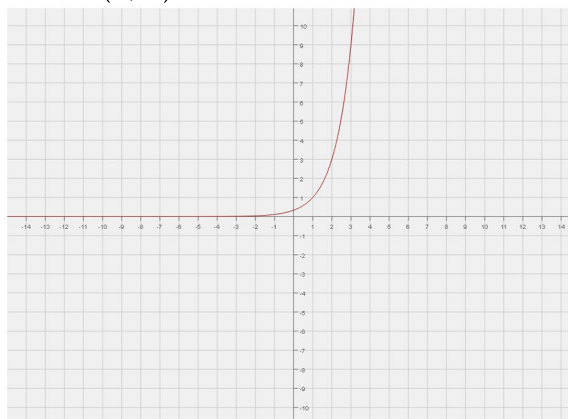
2)  $D: (-\infty, \infty)$   
 $R: (0, \infty)$



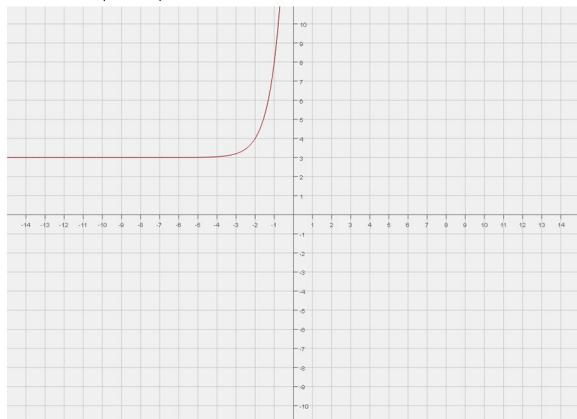
3)  $D: (-\infty, \infty)$   
 $R: (1, \infty)$



4)  $D: (-\infty, \infty)$   
 $R: (0, \infty)$



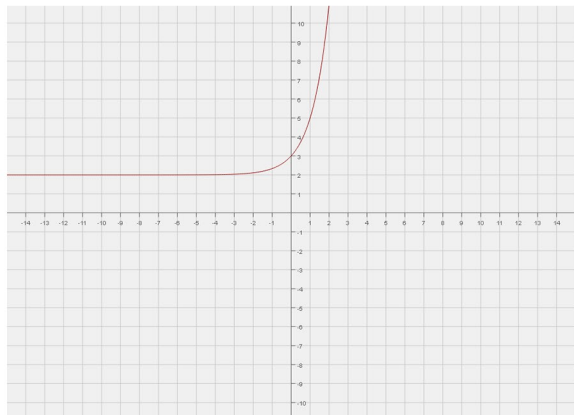
5)  $D: (-\infty, \infty)$   
 $R: (3, \infty)$



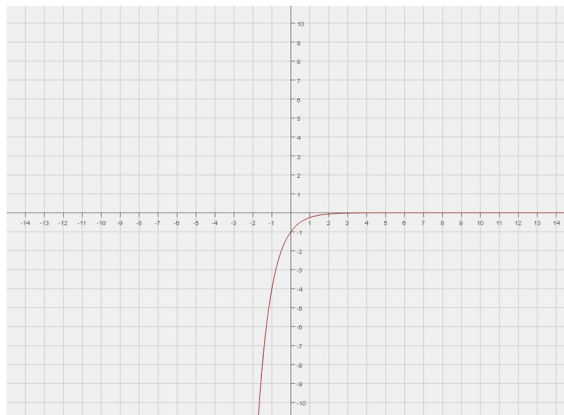
# ANSWER SHEET

## 7-1b

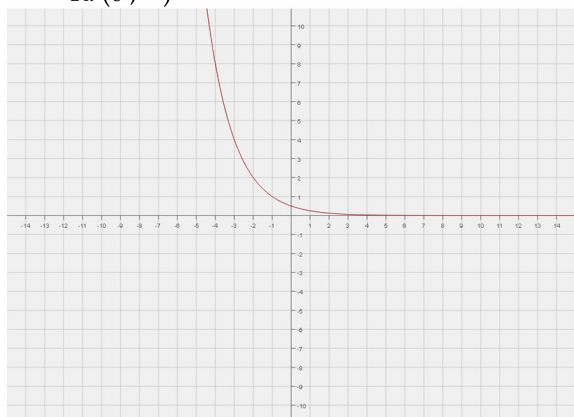
1)  $D: (-\infty, \infty)$   
 $R: (2, \infty)$



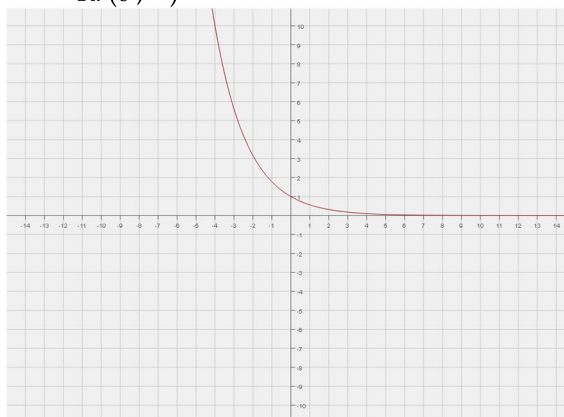
2)  $D: (-\infty, \infty)$   
 $R: (-\infty, 0)$



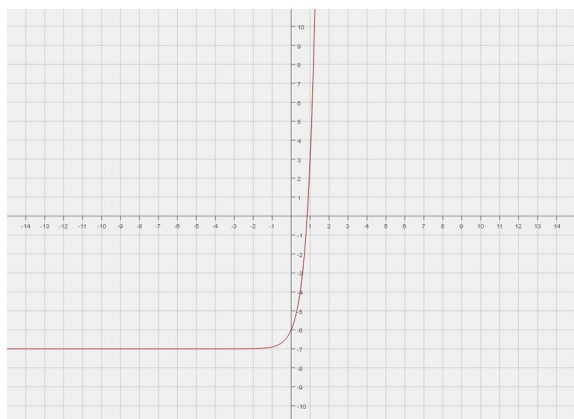
3)  $D: (-\infty, \infty)$   
 $R: (0, \infty)$



4)  $D: (-\infty, \infty)$   
 $R: (0, \infty)$



5)  $D: (-\infty, \infty)$   
 $R: (-7, \infty)$



## ANSWER SHEET

**7-2a** 1) \$8,160      2) \$8,323.20      3) \$11,887.58      4) (below)      5) (below)

**7-2b** 1) 2,200      2) 2,420      3) 284,086      4) (below)      5) (below)

**7-3a** 1) 9,500      2) 9,025      3) 694      4) (below)      5) (below)

**7-3b** 1) \$1,209      2) \$1,124.37      3) \$1,292.16      4) (below)      5) (below)

**7-4a** 1) 2      2) 5      3) 3      4)  $\frac{3}{2}$       5) 2

**7-4b** 1) 4      2)  $\frac{5}{2}$       3) 3      4)  $-\frac{1}{2}$       5) 4

**7-2a 4)** D:  $[0,8)$ ; time starts at zero years (i.e. today) and can go on forever (theoretically)

**7-2a 5)** R:  $[8000, \infty)$ ; The original amount is \$8000 and can grow to an infinite amount (theoretically)

**7-2b 4)** D:  $[0, \infty)$ ; time starts at zero weeks (i.e. today) and can go on forever (or until we stop the experiment)

**7-2b 5)** R:  $[2000, \infty)$ ; the original amount is 2000 bacteria and can grow indefinitely (or until we stop the experiment)

**7-3a 4)** D:  $[0, \infty)$ ; the time starts now (0 weeks) and mathematically it will take forever for there to be none

**7-3a 5)** R:  $[0,10,000]$ ; there were initially 10,000 bacteria and eventually there are none.

**7-3b 4)** D:  $[0, \infty)$ ; the time starts now (0 years) and mathematically it will take forever for the gold to be worthless.

**7-3b 5)** R:  $[0,1,300]$ ; initially the price of gold was \$1300 and eventually the gold became worthless.