–-------->Part A

Variables: x1 = 2; x2 = 2; x3 = 7; z = 27

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9 13

z

x2

s8

s5

x1

x3

s6

s7

s4

z

x1

x2

x3

s1

s2

s3

s4

s5

s6

s7

s8

rhs

1 0 0 0 27

0 0 1 0 2

0 0 0 0 15

0 0 0 0 15

0 1 0 0 2

0 0 0 1 7

0 0 0 0 30

0 0 0 0 24

0 0 0 0 0

–------>Part B

10 14

z

x2

s2

s3

x1

x3

s6

s7

s8

s9

z

x1

x2

x3

s1

s2

s3

s4

s5

s6

s7

s8

s9

rhs

1 0 0 0 0.366 0 0 -0.366 -1.133 0 0 0 0 10

0 0 1 0 -0.033 0 0 -0.033 -0.066 0 0 0 0 1

0 0 0 0 -0.899 1 0 1.1 2.199 0 0 0 0 33

0 0 0 0 0 0 1 -0.2 1.4 0 0 0 0 21

0 1 0 0 0.033 0 0 -0.1 0 0 0 0 0 2

0 0 0 1 0.133 0 0 -0.066 -0.333 0 0 0 0 2

0 0 0 0 0.600 0 0 0.600 -0.799 1 0 0 0 18

0 0 0 0 0.8 0 0 0 -0.799 0 1 0 0 2

0 0 0 0 -0.5 0 0 0.5 1 0 0 -1 0 0

0 0 0 0 -0.266 0 0 0.133 0.666 0 0 0 1 -3

–-------------------------------------------------------------------------------------------------------------------------------------------------- Variables: x1 = 2; x2 = 1 ; x3 = 2; z = 10

not feasable.

–---------->Part C

5 9

z

x1

x2

x3

s4

z

x1

x2

x3

s1

s2

s3

s4

rhs

1 0 0 0 -0.888 0.611 -0.916 0 10

0 1 0 0 0 0.166 -0.166 0 3

0 0 1 0 -0.111 0.055 0 0 2

0 0 0 1 -0.222 0.111 -0.249 0 1

0 0 0 0 -0.666 0.833 -1.249 1 0

–-------------------------------------------------------------------------------------------------------------------------------------------------- Variables: x1 = 3; x2 = 3 ; x3 = 1; z = 10

unbounded