**Matrices**

**April 2015**

26. What value of x satisfies the matrix equation below? [PICTURE]

F. 3.5

G. 4

H. 4.5

J. 5.5

K. 8

**June 2015**

48. Four matrices are given below. [PICTURE]

Which of the following matrix products is undefined?

F. WX

G. WY

H. YZ

J. XW

K. XZ

**December 2015**

10. [PICTURE]

F. [PICTURE]

G. [PICTURE]

H. [PICTURE]

J. [PICTURE]

K. [PICTURE]

**June 2016**

57. Which of the following matrices is equal to the matrix product [PICTURE]?

A. [PICTURE]

B. [PICTURE]

C. [PICTURE]

D. [PICTURE]

E. [PICTURE]

**April 2016**

8. Which of the following augmented matrices represents the system of linear equations below?

3x + 5y = 20

2x – y = 9

F. [PICTURE]

G. [PICTURE]

H. [PICTURE]

J. [PICTURE]

K. [PICTURE]

**December 2016**

55. What is the determinant of the matrix shown below? [PICTURE]

A. 34

B. 4

C. -1

D. -25

E. -31

**June 2017**

60. The table below shows the numbers of rows and columns in each of 5 matrices. [PICTURE]

For distinct values of *k, m,* and *n*, which of the following matrix products is NOT possible?

F. ED

G. DC

H. CD

J. AE

K. AC

**April 2017**

57. For what positive real value of *k*, if any, is the determinant of the matrix [PICTURE] equal to *k*?

(Note: The determinant of matrix [PICTURE] equals *ad* - *bc*.)

A. 3

B. 4

C. 12

D. (rad)12

E. There is no such value *k*.