

BE-Alg. 2 TUESDAY 11-8-11

ACT ① THE determinant of a matrix $\begin{bmatrix} a & b \\ c & d \end{bmatrix}$
KMS
6/09
EQUALS $ad - cb$. WHAT must be
the VALUE of x for the matrix
 $\begin{bmatrix} x & 8 \\ x & x \end{bmatrix}$ to have a determinant of -16 ?

ANS $\begin{vmatrix} x & 8 \\ x & x \end{vmatrix} = x^2 - 8x$ this equals -16

$$x^2 - 8x + 16 = 0$$

2.4x? ✓✓

$$(x - 4)^2 = 0$$

$$x = \{4\}$$

IF you
recognize
Perfect Square
TRINOMIAL

Else: Sum $\Rightarrow -8$

prod $\Rightarrow 16$

$-4 -4$

Since $a = +1$

$$(x - 4)(x - 4) = 0$$

$$x = \{4\}$$

Exam 1 Topics $\Rightarrow$

Practice worksheet topics:

Will work on
Tues. & Weds.

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- Factoring Trinomials of the Form $ax^2 + bx + c = 0$ and solving Quadratic Equations by factoring or by taking the square root of both sides if $b = 0$
 - Simplifying radicals
 - Operations with radicals
 - Operations with complex numbers
 - Operations with fractional exponents
 - Rationalizing denominators
 - Solving Radical Equations.