

ALG 2 - CHPT 6 TEST REVIEW

"HOT SEAT"

- ① Find the intersection of the 3 Planes
(Solve the system of Equations)

$$\begin{aligned}x + y + z &= 3 \\2x - y + 2z &= 6 \\3x + 2y - z &= 13\end{aligned}$$

- ② The parabola $y = ax^2 + bx + c$ passes through
 $(2, 3)$, $(-1, 6)$, $(0, 3)$.

Write the equation of the parabola

- ③ Solve to the nearest .0001

a) $2^x = 17$

b) $5(3^{x+1}) = 85$

- ④ A gallon of milk costs \$3.59. Inflation
has steadily increased 2% per year

a) What did a gallon cost 10 years ago

b) How long til it costs \$10

- ⑤ Find the inverse of $y = 2 + \sqrt{2x-4}$

- ⑥ Solve

a) $2|3x-2| - 30 = -10$

b) $\sqrt{3x^2+11x} = 2$

1) $(4, 0, -1)$

2) $y = x^2 - 2x + 3$

3) a) 4.097 b) 1.579

4) a) \$2.43

b) 26.1 yrs

5) $y = \frac{(x-2)^2 + 4}{2}$

6) a) $x=4$ $x=-\frac{2}{3}$

b) $x=\frac{1}{3}, -4$