

## Review Packet

4.)  $x^2 - 4x + 4 = 7 + 4$

B

$$\frac{4}{2} = 2^2$$

$$(x-2)^2 = 11$$

$$x-2 = \pm\sqrt{11}$$

$$x = 2 \pm \sqrt{11}$$

9.)  $y = a(x-h)^2 + k$

$$7 = a(4-2)^2 - 5$$

$$7 = 4a - 5$$

$$\frac{7+5}{12} = \frac{4a}{4}$$

$$12 = 4a$$

$$3 = a$$

E

$$y = 3(x-2)^2 - 5$$

$$y = 3(x^2 - 4x + 4) - 5$$

$$y = 3x^2 - 12x + 12 - 5$$

$$y = 3x^2 - 12x + 7$$

$$11.) x^2 - 4x + 21 = 0$$

$$x = \frac{-(-4) \pm \sqrt{(-4)^2 - 4(1)(21)}}{2(1)}$$

$$x = \frac{4 \pm \sqrt{-68}}{2} \rightarrow \frac{\sqrt{-1} \sqrt{4} \sqrt{17}}{2(i\sqrt{17})}$$

$$x = \frac{4 \pm 2i\sqrt{17}}{2} = 2 \pm i\sqrt{17}$$

A

$$3.) y = 5\sqrt{x+4}$$

$$y = |4x - 3|$$

math

num

1. abs(

B

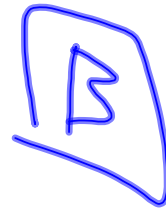
$$12.) [x-(3+i)][x-(3-i)](x+7)$$

$$[(x-3)+i][(x-3)-i](x+7)$$

$$[(x-3)^2 - i^2](x+7) = (x^2 - 6x + 9 + 1)(x+7)$$

$$(x^2 - 6x + 10)(x+7) = x(x^2 - 6x + 10) + 7(x^2 - 6x + 10)$$

$$\begin{aligned} & x^3 - 6x^2 + 10x + 7x^2 - 42x + 70 \\ & = x^3 + x^2 - 32x + 70 \end{aligned}$$



15.) 1500



$$16.) A = P\left(1 + \frac{r}{n}\right)^{nt}$$

$$\frac{4550}{2700} = \frac{2700}{2700} \left(1 + \frac{0.09}{12}\right)^{12t}$$

$$\log 1.685185 = \log 1.0075^{12t}$$

$$\frac{\log 1.685185}{\log 1.0075} = 12t$$

$$\frac{69.84397273}{12} = \frac{12t}{12}$$

$$5.8203 \dots \approx t$$

$$\frac{.8203 \times 12}{7}$$