review packet

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

B

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

$(x - 2)^2 = \sqrt{11}$

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

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

B

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

$y = |4x - 3|$

math

Num

1.) abs(

8.)

$$(y-2)x = \frac{3y+7}{y-2}(y-2)$$

$$xy - 2x = 3y + 7$$
$$\underline{-7 \qquad\qquad -7}$$

$\boxed{C}$

$$xy - 2x - 7 = 3y$$
$$\underline{-xy \qquad\qquad -xy}$$
$$-2x - 7 = 3y - xy$$
$$-2x - 7 = y(3-x)$$

$\left(f^{-1} = \dfrac{2x+7}{x-3} \right)$

$$\frac{-2x-7}{3-x} \qquad \frac{y(3-x)}{3-x}$$

$$\frac{-2x-7}{3-x} = y$$

9.) $y = 3(x-2)^2 - 5$ $\qquad y = a(x-h)^2 + k$

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

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

$$\left(y = 3x^2 - 12x + 7 \right)$$

$\boxed{E}$

15.) $y = 1216/(1+75e^{-0.03x})$

1500

0

1000

19.) $2x - 3y - 5 = 0$

$-2x \qquad +5 \quad = 2x + 5^-$

$\dfrac{-3y}{-3} = \dfrac{-2x}{-3} + \dfrac{5^-}{-3}$

$y = \dfrac{2}{3}x - \dfrac{5}{3}$

$m_\perp = -\dfrac{3}{2}$

$(-1, 2)$
$x_1 y_1$

$\boxed{B}$
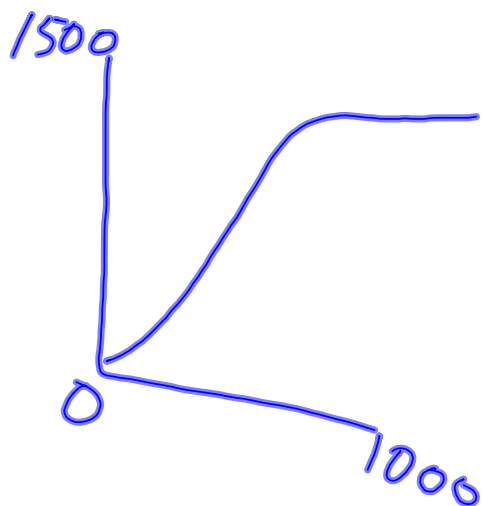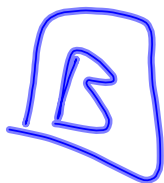
$y - y_1 = m(x - x_1)$

$(2)\, y - 2 = -\dfrac{3}{2}(x + 1)$

$2y - 4 = -3(x + 1)$

$2y - 4 = -3x - 3$
$+3x + 3 \qquad +3x + 3$

$3x + 2y - 1 = 0$

21.) $(fg)4 = f(4) \cdot g(4)$

$f(4) = (4-1)^2 = 9$

$g(4) = 3 - 4 = -1$

$9 \cdot -1 = \boxed{-9}$

D