EMA **Name: _____**

The Return of Simplifying **Date: _____ Period: ___**

Simplify.

1.) $\sqrt{-32}$ **2.)** $\sqrt{20}$ **3.)** $\sqrt{-60}$ **4.)** $\sqrt{75}$

5.) $\sqrt{72}$ **6.)** $\sqrt{-9}$ **7.)** $\sqrt{56}$ **8.)** $\sqrt{-30}$

9.) $\sqrt{-4}$ **10.)** $\sqrt{80}$ **11.)** $\sqrt{-33}$ **12.)** $\sqrt{-24}$

Simplify. Leave answers in simplified radical form.

13.) $x = \frac{-(-3)\pm\sqrt{(-3)^2-4(8)(2)}}{2(8)}$ **14.)** $x = \frac{-(12)\pm\sqrt{(12)^2-4(3)(-7)}}{2(3)}$

15.) $x = \frac{-(10)\pm\sqrt{(10)^2-4(5)(7)}}{2(5)}$ **16.)** $x = \frac{-(-6)\pm\sqrt{(-6)^2-4(-3)(-5)}}{2(-3)}$

Evaluate.

17.) If $f(x) = -2x^2 - 4x + 7$, find $f(3)$.

18.) If $g(x) = 3x^2 + 5x - 4$, find $g(-4)$.

19.) If $h(x) = -x^2 + 3x$, find $h(m + 2)$.

20.) If $c(x) = 2x^2 - 6x - 11$, find $c(t - 3)$.

Review.

21.) Simplify. $\frac{2}{3} + 3\left(2 - \frac{1}{4}\right) - 2$

22.) Factor. $4x^2 - 16x + 9$

23.) Solve. $5 - 3(m - 4)^2 = 41$

24.) Given $(-3, 2)$ & $(6, 5)$ lie on a line write an equation in slope-intercept form.