## MONDAY

Rewrite the following in vertex form using completing the square. Show all work!

$$
y=x^{2}+8 x+6
$$

Rewrite the following in vertex form using completing the square. Show all work!

$$
y=2 x^{2}+12 x+7
$$

Rewrite the following in vertex form using completing the square. Show all work!

$$
y=x^{2}+10 x+2
$$

Rewrite the following in vertex form using completing the square. Show all work!

$$
y=x^{2}+5 x+6
$$

| WUESDAY |  |
| :---: | :---: |
| Rearrange the equation below so it is in standard form. Then, identify the variables $a, b$ and $c$. $15 x=12-9 x^{2}$ | Solve the quadratic equation (use any method). $x^{2}+5 x=24$ |
| Rearrange the equation below so it is in standard form. Then, identify the variables $a, b$ and $c$. $x+4 x^{2}=-7$ | Solve the quadratic equation (use any method). $25 x^{2}=144$ |
| Solve the quadratic equation (use any method). $x^{2}-7 x-8=0$ | Solve the quadratic equation (use any method). $x^{2}=41 x$ |
| Use the quadratic formula to solve $3 x^{2}+5 x+1=0$ | Use the quadratic formula to solve $2 x^{2}-4 x+3=0$ |

$\qquad$

## WEDNESDAY

Use the quadratic formula to solve

$$
2 x^{2}+8 x-24=0
$$

Draw a diagram and solve by FACTORING.
The length of a rectangle is 2 feet more than three times the height. The area is $165 \mathrm{ft}^{2}$. Find the height of the rectangle.

Rewrite in VERTEX form.

$$
y=2 x^{2}-4 x+3
$$

If an object is thrown upward, its approximate height (h) in feet is given by the formula: $\boldsymbol{h}=\mathbf{- 1 6} \boldsymbol{t}^{\mathbf{2}}+\boldsymbol{v} \boldsymbol{t}+\boldsymbol{c}$, where " t " is the time in motion in seconds, " v " is the initial upward velocity, and " $c$ " is the initial height in feet. Plug in the values below into the formula above and solve by using the quadratic formula.

A rocket is shot upward from an initial height of 3 feet and an initial velocity of $80 \mathrm{ft} / \mathrm{s}$. Find the value of "t" when "h" is zero (when the rocket hits the ground).

THURSDAY
Write a simplified expression for the area of the shaded region (NOTE; this is FOIL and Subtraction! Not solving.) $2 x+3$


If an object is thrown upward, its approximate height (h) in feet is given by the formula: $\boldsymbol{h}=-\mathbf{1 6 t} \boldsymbol{t}^{\mathbf{2}} \boldsymbol{v} \boldsymbol{v}+\boldsymbol{c}$, where "t" is the time in motion in seconds, " v " is the initial upward velocity, and " c " is the initial height in feet. Plug in the values below into the formula above and solve by using the quadratic formula.

A ball is 5 feet above the ground and is thrown with an initial velocity of $64 \mathrm{ft} / \mathrm{s}$. Find the amount of time ( t ) that the ball is in the air before it hits the ground. ( $\mathrm{h}=0$ when the ball hits the ground).

Find two consecutive ODD integers such that the square of the first, added to 3 times the second is 24 .
HINTS: consecutive odd integers: $\mathrm{x}, \mathrm{x}+2, \mathrm{x}+4$, etc. SOLVE THIS BY FACTORING OR QUADRATIC FORMULA.

