College Algebra
Weekly Quiz 1

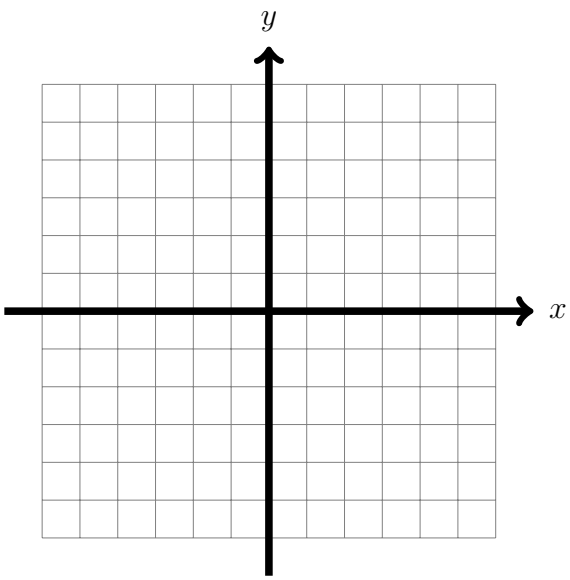
Name:_____

No Work ⇔ No Points

Use Pencil Only ⇔ Be Neat & Organized

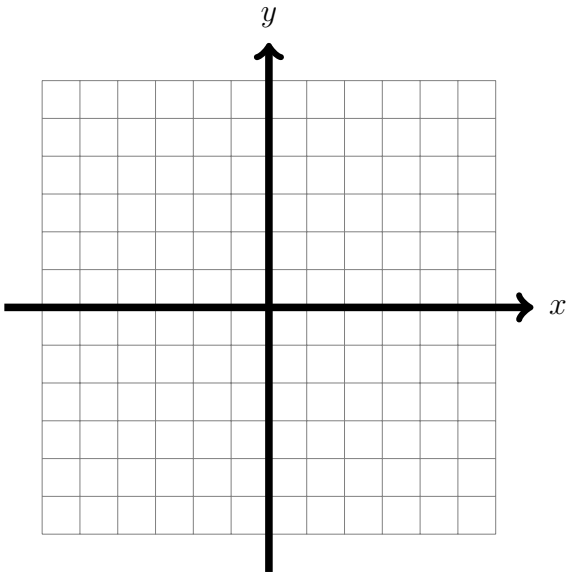
---

1. (3 points) Graph using the intercept method: $3x - 4y = -12$



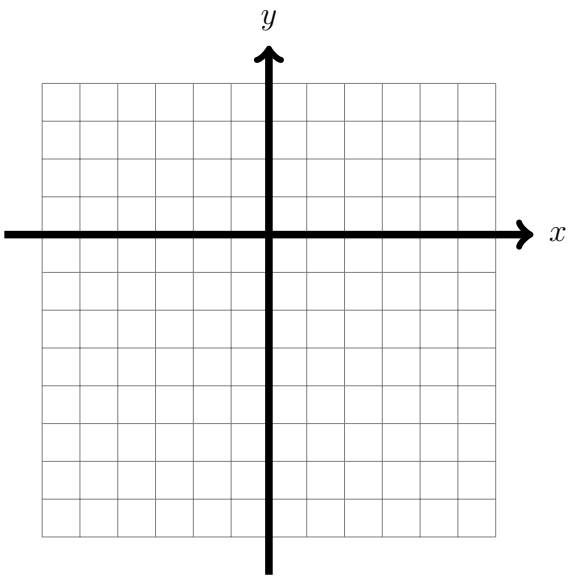
---

2. (3 points) Graph using the y–int and the slope: $f(x) = -\frac{2}{3}x - 2$



---

3. (5 points) Draw $(x-2)^2+(y+3)^2=16$. Give domain and range in interval notation.



3. _____

---

4. (5 points) Find the equation of the circle in standard form $(x-h)^2+(y-k)^2=r^2$ with endpoints $(-3,4)$ and $(5,6)$ of its diameter.

4. _____

---

5. (6 points) Find all intercept for the graph of $y=3x^2-2x-5$.

5. _____

---

6. (8 points) Solve:

$$\begin{cases} x + 2y + z = 0 \\ 2x - y - z = 5 \\ x + y - 2z = 1 \end{cases}$$

6. _____

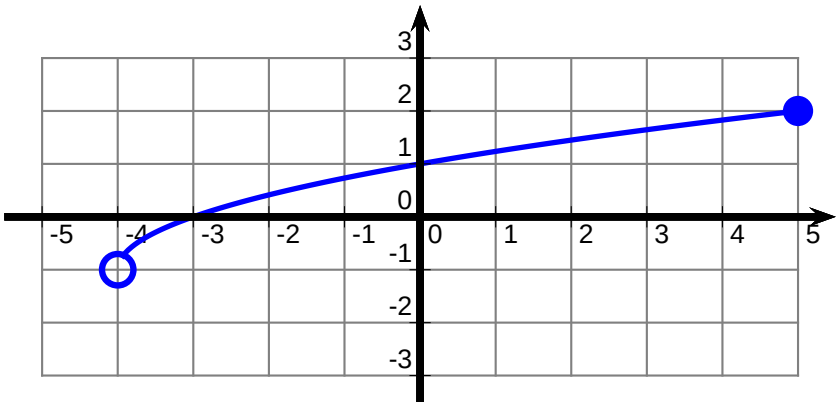
---

7. (6 points) Find and simplify $\dfrac{f(x+h) - f(x)}{h}$ for $f(x) = x^2 - 4x$, then evaluate the result for $h = 0$.

7. _____

---

8. Consider the graph of the function $f(x)$ below:



(a) (3 points) Give its domain in interval notation.

(a) _____

(b) (3 points) Give its range in interval notation.

(b) _____

(c) (2 points) Find all $x-$ intercepts, if any.

(c) _____

(d) (2 points) Find all $y-$intercepts, if any.

(d) _____

(e) (4 points) Graph $-f(x+2)-1$ below.