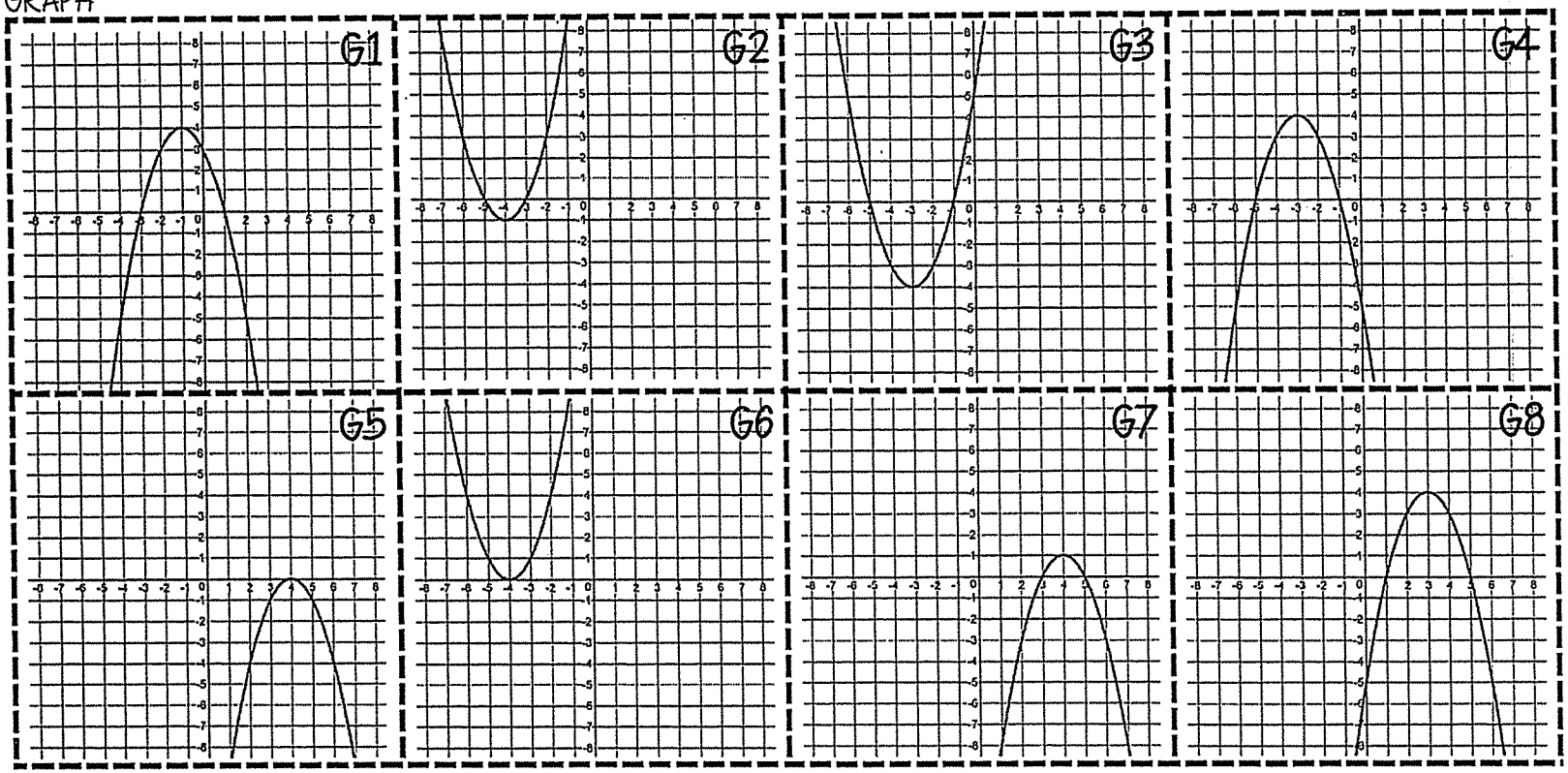
GRAPH




STANDARD FORM OF EQUATION

| | | | |
|---|---|---|---|
| A $f(x) = -x^2 - 6x - 5$ | B $f(x) = -x^2 + 6x - 5$ | C $f(x) = x^2 + 6x + 5$ | D $f(x) = -x^2 - 2x + 3$ |
| E $f(x) = x^2 + 8x + 16$ | F $f(x) = -x^2 + 8x - 16$ | G $f(x) = x^2 + 8x + 15$ | H $f(x) = -x^2 + 8x - 15$ |

VERTEX

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I $(-1,4)$ | J $(-3,-4)$ | K $(-4,0)$ | L $(-4,-1)$ | M $(4,1)$ | N $(-3,4)$ | O $(3,4)$ | P $(4,0)$ |

ZEROS

| | | | | | | |
|---|---|---|---|---|---|---|
| Q $(-5,0)$ | Q $(-5,0)$ | Q $(-5,0)$ | R $(-4,0)$ | S $(-3,0)$ | S $(-3,0)$ | T $(-1,0)$ |
| T $(-1,0)$ | U $(1,0)$ | U $(1,0)$ | V $(3,0)$ | W $(4,0)$ | X $(5,0)$ | X $(5,0)$ |

# CHARACTERISTICS OF QUADRATIC FUNCTIONS

| 1. $f(x) = -(x-3)^2 + 4$ | | 2. $f(x) = (x+4)^2$ | | 3. $f(x) = -(x+1)^2 + 4$ | | 4. $f(x) = -(x-4)^2$ | |
|---|---|---|---|---|---|---|---|
| GRAPH | | GRAPH | | GRAPH | | GRAPH | |
| STANDARD FORM OF EQUATION | | STANDARD FORM OF EQUATION | | STANDARD FORM OF EQUATION | | STANDARD FORM OF EQUATION | |
| VERTEX | MAX / MIN | VERTEX | MAX / MIN | VERTEX | MAX / MIN | VERTEX | MAX / MIN |
| ZEROS | | ZEROS | | ZEROS | | ZEROS | |

| 5. $f(x) = (x+3)^2 - 4$ | | 6. $f(x) = -(x+3)^2 + 4$ | | 7. $f(x) = -(x-4)^2 + 1$ | | 8. $f(x) = (x+4)^2 - 1$ | |
|---|---|---|---|---|---|---|---|
| GRAPH | | GRAPH | | GRAPH | | GRAPH | |
| STANDARD FORM OF EQUATION | | STANDARD FORM OF EQUATION | | STANDARD FORM OF EQUATION | | STANDARD FORM OF EQUATION | |
| VERTEX | MAX / MIN | VERTEX | MAX / MIN | VERTEX | MAX / MIN | VERTEX | MAX / MIN |
| ZEROS | | ZEROS | | ZEROS | | ZEROS | |