

For each of the following, find the vertex, focus, directrix, and end points of the latus rectum. Also graph each parabola

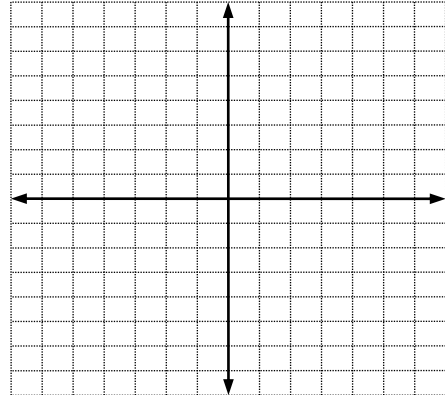
1. $(x-2)^2 = 8(y+1)$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____



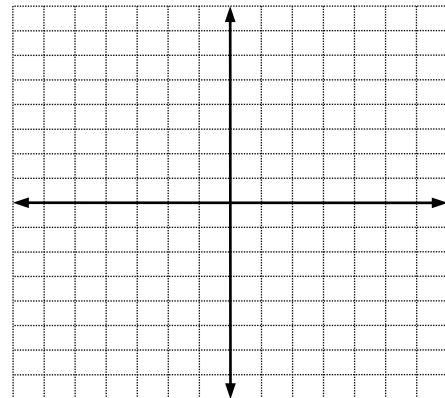
2. $(y-2)^2 = -16(x-3)$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____



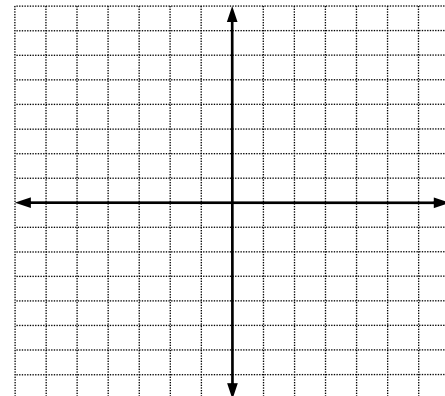
3. $(x-1)^2 = 12(y-1)$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____



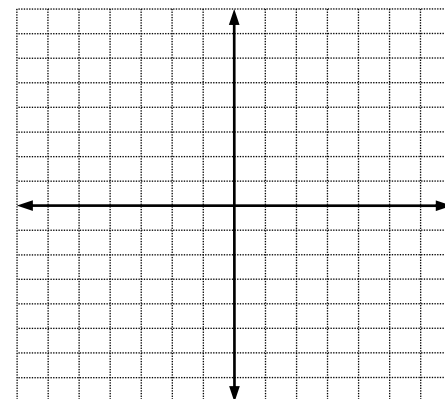
4. $(y-4)^2 = 8(x-1)$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____



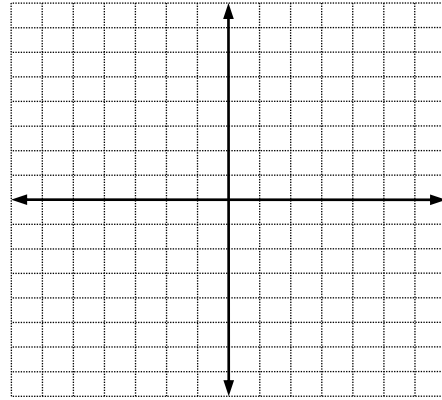
5. $2(x+2)^2 = 12y$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____



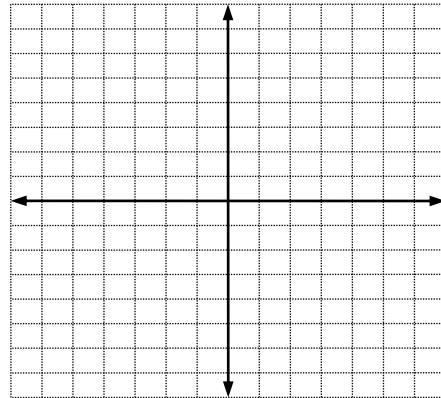
6. $y^2 + 4(x+2) = 0$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____



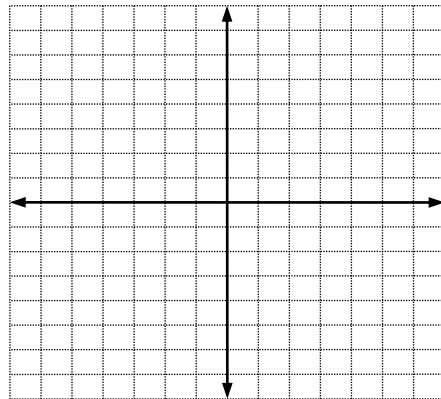
7. $3(y-3)^2 = 21x$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____



8. $y = \frac{1}{4}(x-3)^2 + 5$

Vertex: _____

Focus: _____

Directrix: _____

E of LR: _____

