## Families of Functions

Lesson Overview: Match the graph cards to the cards that give the corresponding equation and the type of function.

Directions: Working in pairs or groups, as directed by the teacher, complete the matching and record your answers below.
(No graphing calculator or computer may be used.)

| GRAPH | EQUATION | TYPE OF FUNCTION |
| :---: | :--- | :--- |
| A |  |  |
| B |  |  |
| C |  |  |
| D |  |  |
| E |  |  |
| F |  |  |
| G |  |  |
| H |  |  |
| I |  |  |
| J |  |  |
| K |  |  |

## FAMILY OF FUNCTIONS

Answer Sheet

| GRAPH | EQUATION | TYPE OF FUNCTION |
| :---: | :--- | :--- |
| A | $Y=x^{2}+3$ | Square (quadratic) |
| $B$ | $Y=100(.8)^{x}$ | Exponential |
| C | $Y=-2 x-3$ | Linear |
| $D$ | $Y=x^{2}$ | Linear |
| $E$ | $Y=2 / x$ | Inverse (rational) |
| $F$ | $Y=4+2 x$ | Linear |
| G | $Y=8-\frac{1}{2} x$ | Exponential |
| $H$ | $Y=2^{x}-2$ | Exponential |
| I | $Y=8\left(\frac{1}{2}\right)^{x}$ | Linear |
| $J$ | $Y=3 x-3$ | $Y=x^{2}-3$ |
| K | $Y=x$ |  |

