

## Samples      Functions and their graphs

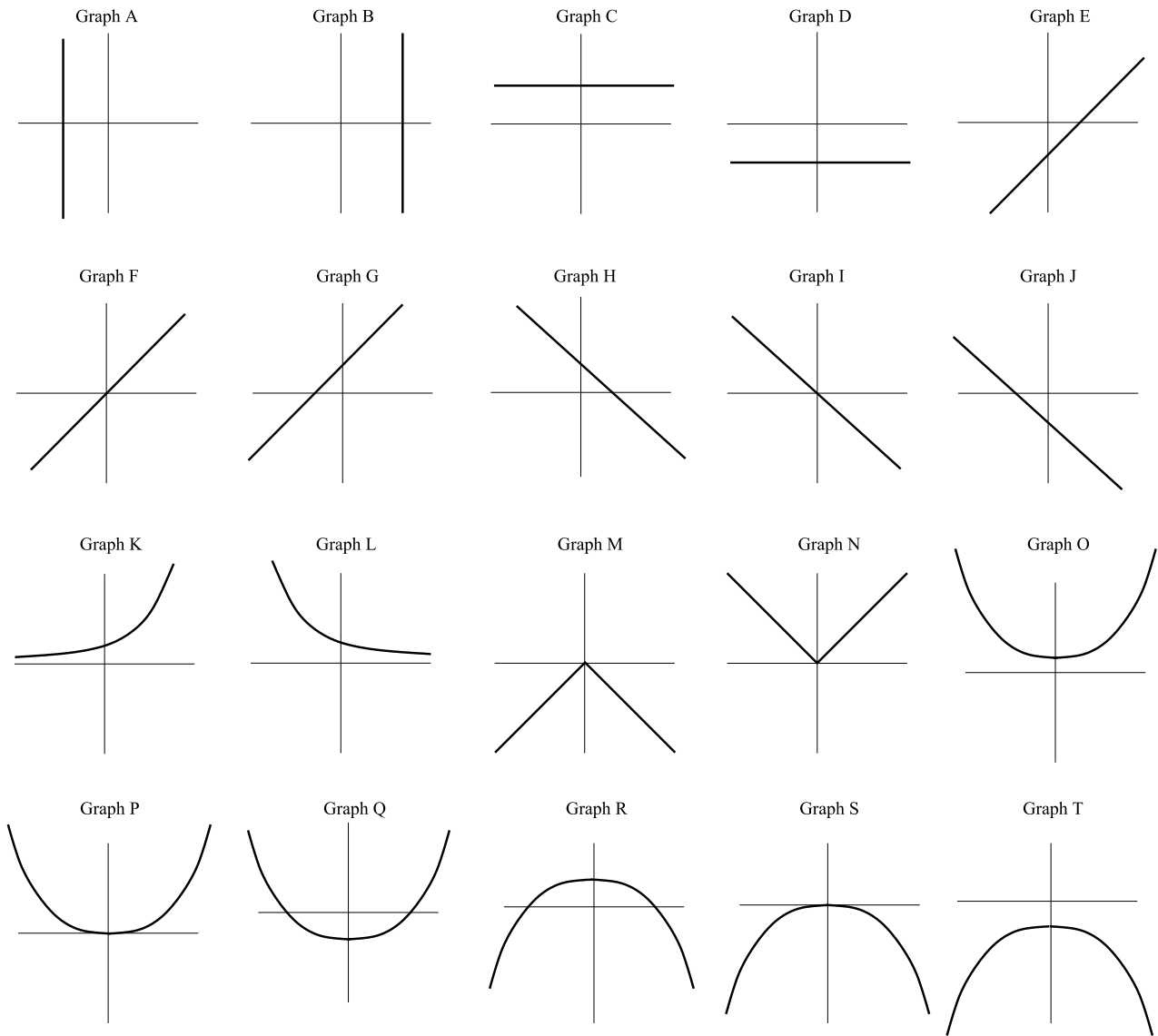


Figure 1: Graphs of various equations.

1. There are eight equations given in this question and you need to match each equation with its corresponding graph. The graphs are shown in Figure 1.

(1)  $2y + 5x^2 = 16y + 10x^2 + 1$

(2)  $y = e^{3x}$

(3)  $11y - 7 = 5x - 7$

(4)  $-15y + 9 = x^2 + 9$

(5)  $11x - 8 = -3y + 11x - 10$

(6)  $-7y + 8x - 4 = 9y + 7$

(7)  $1 = -13x$

(8)  $y = e^{-x}$

- 2.** There are eight equations given in this question and you need to match each equation with its corresponding graph. The graphs are shown in Figure 1.

(1)  $-14y - 6x^2 + 7 = -15y - 9x^2 - 16$

(2)  $9x - 4 = 13x$

(3)  $y = e^{3x}$

(4)  $6y - 15 = -16$

(5)  $y = 8 \times |9x|$

(6)  $12y - 5 = 14y - 15x + 13$

(7)  $14x + 5 = 15x - 1$

(8)  $-x - 5 = -10y - 16x - 14$

- 3.** There are eight equations given in this question and you need to match each equation with its corresponding graph. The graphs are shown in Figure 1.

(1)  $9y + 8x - 9 = 12y + 8x - 10$

(2)  $-9y + 5x - 2 = 16y + 8x - 9$

(3)  $y = 2 \times |-13x|$

(4)  $y = -5 \times |8x|$

(5)  $4y + 6x - 14 = 6y - 5x - 14$

(6)  $-4y - 13 = -9y + 5x^2$

(7)  $15x^2 = 5y$

(8)  $7y = 15y + 6x^2 + 15$