

**Exercises of Study of functions**

1) Match each linear function to its graph:

a)  $y = 2x + 2$

b)  $y = 0.5x + 8$

c)  $y = -2.7x - 7$

d)  $y = 5$

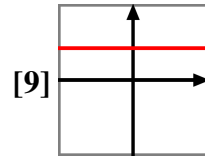
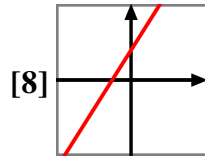
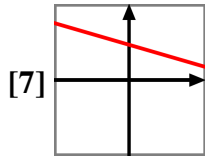
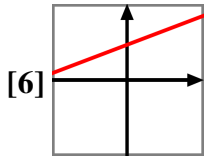
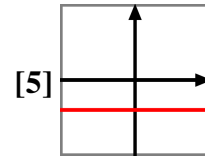
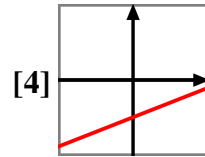
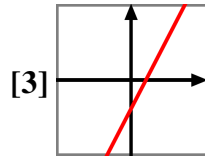
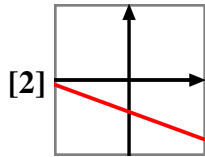
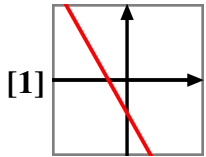
e)  $y = 0.5x - 8$

f)  $y = -0.6x - 3$

g)  $y = -0.4x + 6$

h)  $y = -8$

i)  $y = 2x - 2$



2) Match each polynomial function with its graph:

a)  $y = x^2 + 5$

b)  $y = -5x^2$

c)  $y = -3x^2 + 6$

d)  $y = -2x^2 + x$

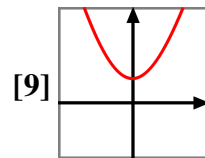
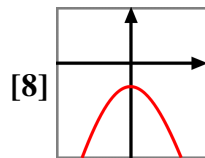
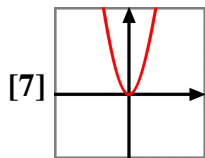
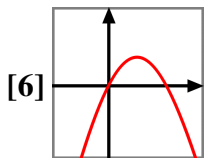
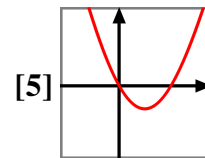
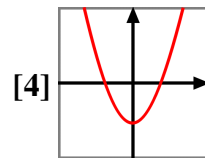
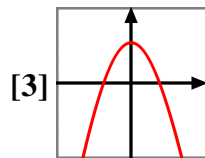
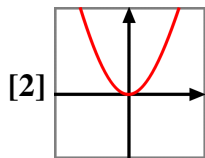
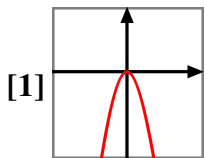
e)  $y = 0.9x^2$

f)  $y = 4x^2$

g)  $y = 2x^2 - 4$

h)  $y = 3x^2 - 7x$

i)  $y = -2x^2 - 2$



3) Match each polynomial function with its graph:

a)  $y = -2x^3 + 3$

b)  $y = 2x^3 - 7$

c)  $y = 2x^3 + 8$

d)  $y = -4x^3 - 4x^2$

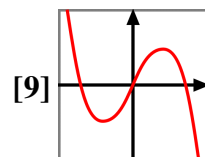
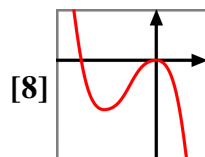
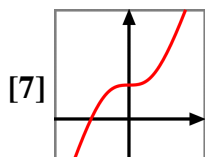
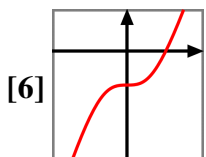
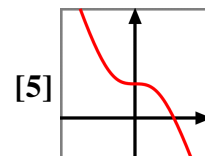
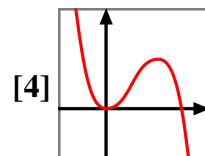
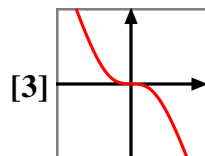
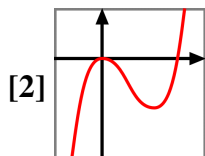
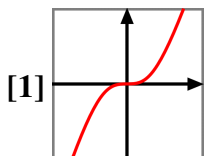
e)  $y = -4x^3$

f)  $y = 2x^3 - 4x^2$

g)  $y = -2x^3 + 9x^2$

h)  $y = x^3$

i)  $y = -3x^3 + x$



**Exercises of Study of functions**

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4) Match each function with its graph:

a)  $y = \frac{4}{x+3}$

b)  $y = 4^{-x}$

c)  $y = -\sqrt{4x}$

d)  $y = -\frac{21}{x+4}$

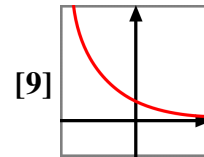
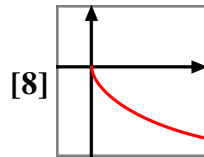
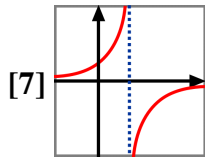
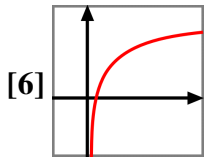
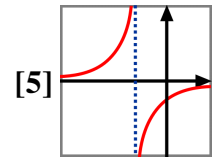
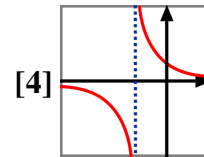
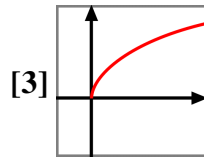
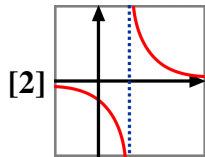
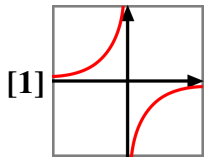
e)  $y = -\frac{17}{x-3}$

f)  $y = \ln(9x)$

g)  $y = \frac{1}{x-7}$

h)  $y = \sqrt{x}$

i)  $y = -\frac{25}{x}$



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**Answers:**

- |    |        |        |        |        |        |        |
|----|--------|--------|--------|--------|--------|--------|
| 1) | a) [8] | b) [6] | c) [1] | d) [9] | e) [4] | f) [2] |
|    | g) [7] | h) [5] | i) [3] |        |        |        |
| 2) | a) [9] | b) [1] | c) [3] | d) [6] | e) [2] | f) [7] |
|    | g) [4] | h) [5] | i) [8] |        |        |        |
| 3) | a) [5] | b) [6] | c) [7] | d) [8] | e) [3] | f) [2] |
|    | g) [4] | h) [1] | i) [9] |        |        |        |
| 4) | a) [4] | b) [9] | c) [8] | d) [5] | e) [7] | f) [6] |
|    | g) [2] | h) [3] | i) [1] |        |        |        |