

19 Multiple choice questions

1. the U-shaped graph of a quadratic function
 - a. maximum
 - b. parabola
 - c. vertex
 - d. hyperbola
2. the turning point of a parabola
 - a. hyperbola
 - b. vertex
 - c. parabola
 - d. model
3. a function in the form of $y = a/x$
 - a. exponential function
 - b. hyperbolic function
 - c. cubic function
 - d. quadratic function
4. a line to which a curve gets very close but never actually touches
 - a. asymptote
 - b. model
 - c. vertex
 - d. hyperbola
5. the section of a curve for which the gradient of the tangent to the curve is positive
 - a. decreasing
 - b. hyperbola
 - c. parabola
 - d. increasing
6. a function in the form of $y = 2^x + c$ for example
 - a. exponential function
 - b. quadratic function
 - c. exponential growth
 - d. hyperbolic function

7. a function in the form of $y = x^2 + bx + c$
 - a. quadratic function
 - b. cubic function
 - c. exponential function
 - d. hyperbolic function
8. a function that is not in the linear form
 - a. hyperbolic function
 - b. cubic function
 - c. non-linear function
 - d. exponential function
9. using mathematics to describe a real-life pattern or relationship
 - a. maximum
 - b. model
 - c. vertex
 - d. minimum
10. the lowest value reached
 - a. maximum
 - b. vertex
 - c. minimum
 - d. model
11. the section of a curve for which the gradient of the tangent to the curve is negative
 - a. parabola
 - b. increasing
 - c. vertex
 - d. decreasing
12. growth whose rate becomes ever more rapid in proportion to the growing total number or size
 - a. initial value
 - b. exponential function
 - c. exponential growth
 - d. proportional to

13. the value at the beginning (when $t = 0$)
- initial value
 - parabola
 - minimum
 - increasing
14. the highest value reached
- model
 - minimum
 - parabola
 - maximum
15. a relationship between variables in which a change in one variable results in a direct change in the other variable
- parabola
 - asymptote
 - hyperbola
 - proportional to
16. the number that relates two variables that are directly proportional or inversely proportional to one another; it is the k in a variation formula
- non-linear function
 - exponential function
 - constant of variation
 - quadratic function
17. a function in the form of $y = x^3 + c$
- non-linear function
 - quadratic function
 - hyperbolic function
 - cubic function
18. the graph of a hyperbolic function
- vertex
 - hyperbola
 - model
 - parabola

19. the value at which a straight line graph cuts the vertical axis
- a. initial value
 - b. vertex
 - c. decreasing
 - d. vertical intercept