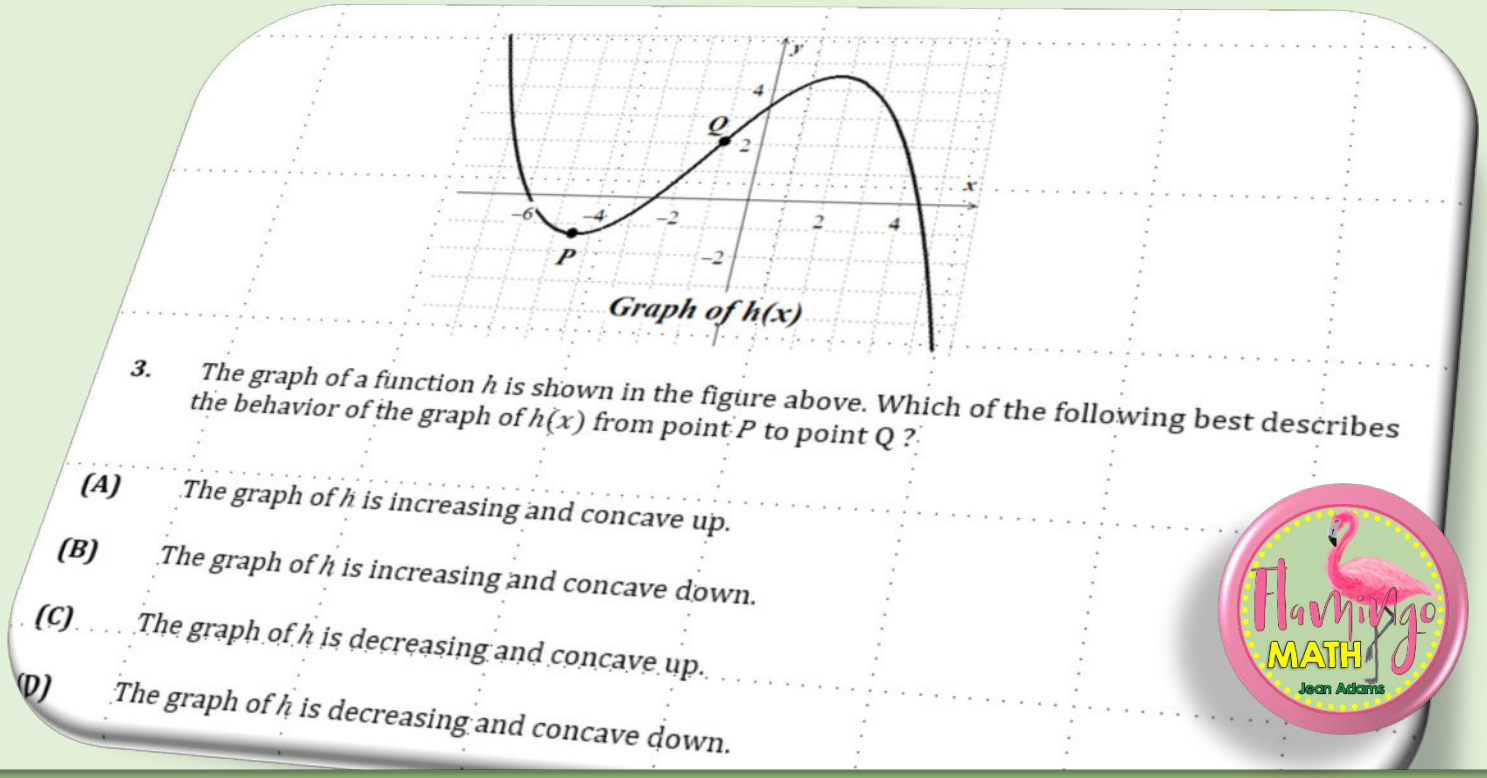
AP® Precalculus

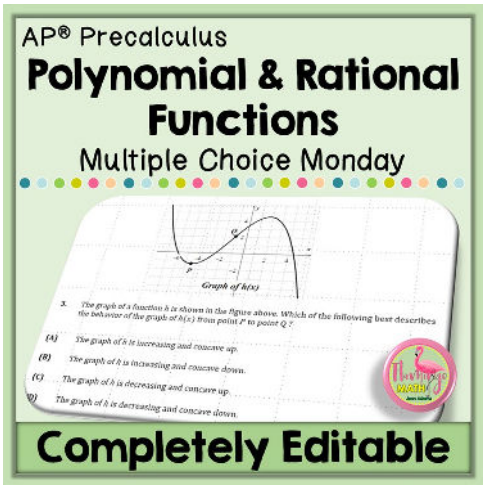
Polynomial and Rational Functions

Multiple Choice Monday



Flamingo MATH
Jean Adams

Completely Editable



Polynomial & Rational Functions Multiple Choice Monday

Help your AP Precalculus students prepare for the AP Calculus Exam with this set of 33 fully-editable prompts for topics on Polynomial & Rational Functions in Unit 1.

Multiple Choice Monday Skill Set Unit #1

Use this fully-editable set of 33 multiple choice questions for a fast-paced review of AP-Style questions on topics related to the AP Precalculus Exam. The resource is part 1 of a series for exam preparation covering unit 1 concepts for ***Polynomial & Rational Functions.***

Using the product:

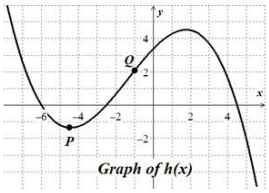
Teachers can edit the 33 questions to create your own assignment that meets your teaching schedule and needs.

Students are expected to complete each multiple-choice prompt in under 2 minutes as a training goal.

You can use the practice set as a general review or group activity to help students prepare for the big day.

Note: **This is the editable version of the Multiple Choice Monday Polynomial & Rational Functions Google Edition.**

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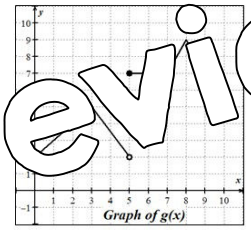
3. The graph of a function h is shown in the figure above. Which of the following best describes the behavior of the graph of $h(x)$ from point P to point Q ?

(A) The graph of h is increasing and concave up.

(B) The graph of h is increasing and concave down.

(C) The graph of h is decreasing and concave up.

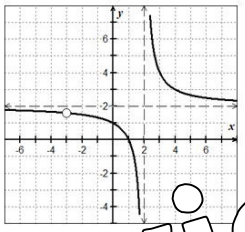
(D) The graph of h is decreasing and concave down.



4. What is the average rate of change of g over the interval $0 \le x \le 5$?

(A) $\frac{3}{10}$ **(B)** $\frac{2}{5}$

(C) 0 **(D)** 1



18. The graph of the ratio [illegible] is shown above. Which of the following could be the [illegible]

(A) $\frac{(x}{(x-2)}$ [illegible] $3)$

(B) $\frac{(x+3)(x+2)}{(x+2)(x-3)}$

(C) $\frac{2(x+3)(x-1)}{(x-2)(x+3)}$

(D) $\frac{2(x-3)(x-2)}{(x-2)(x+3)}$

19. Let $f(x) = x^2 + 8x + 4$ and $g(x) = 2x^2 + 5x - 6$. Find all intervals on which $g(x) \ge f(x)$.

(A) $[-2, 5]$ **(B)** $[5, \infty)$

(C) $[-2, 5] \cup \left[\frac{5}{4}, \infty\right)$ **(D)** $(-\infty$ [illegible]

1	8.2
2	6.5
3	5
4	3.7
5	2.6
6	1.7

22. What type of function would be the most appropriate to model the relationship between x and y for the data set shown in the table above?

(A) A linear function is best, because the data roughly appear to form a line.

(B) A linear function is best, because the rate of change is constant.

(C) A quadratic function is best, because the rate of cha[illegible]s decreasing at a c[illegible]ant

(D) A quadratic function is best, because the point[illegible]gh[illegible]ope[illegible]rve

23. Le[illegible]e a polynomial function whose graph has a point of inflection at $x = 4$. Which of the [illegible]owing statements about h must be true?

(A) The graph of the rate of change of h has a zero that will cross the x-axis at $x = 4$.

(B) The graph of the rate of change of h has a relative extremum at $x = 4$.

(C) The graph of h has a relative extremum at $x = 4$.

(D) The graph of h is tangent to the x-axis at $x = 4$.

x	2.999	2.9999	3.0001	3.001
$f(x)$	5.2031	5.221	5.224	5.261

32. The table above provides values of the function $f(x)$ for x-values near $x = 3$. Which of the following is true for f?

(A) The rate of change of f at $x = 3$ is approximately 5.2.

(B) The rate of change of f at $x = 3$ is approximately 15.

(C) The rate of change of f at $x = 3$ is increasing at a rate of ap[illegible]ma[illegible]5.

(D) The rate of change of f[illegible]3 is [illegible]as[illegible]a ra[illegible]ap[illegible]imat[illegible]25.

t (hours)	1	5	11	16	23
$V(t)$	22	63	54	78	27

33. The function V gives the traffic flow in a 24-hour period over the Sunshine Skyway Bridge in Sarasota, Florida. The table above gives the number of vehicles of $V(t)$ for selected values of t, in hours, for $0 \le t \le 24$. A quartic regression is used to model these data. What is the value of $V(19)$ predicted by the quartic function model?

A. 38.630 **B.** 54.783

C. 83.928 **D.** 89.134

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