ALGEBRA 2 · CLASSWORK

Determine Positive or Negative Intervals

SCORE / 25

01 Part A · Practice

A quadratic function can change sign only at its zeros: if it opens up it is negative between the zeros and positive outside them (the reverse if it opens down).

EXAMPLE

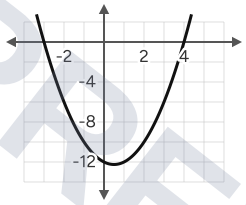
Where is $f(x) = (x + 2)(x - 4)$ negative?

1. Zeros -2 and 4.
2. Opens up, so the graph is below the x-axis between the zeros.
3. Negative for $-2 < x < 4$.

1 ●○○ Find where $f(x) = 2x^2 + 6x - 36$ is positive.

2 ●○○ For what values of x is $f(x) = x(x - 1)$ positive?

3 ●○○ Where is the function positive?



4 ●○○ For what values of x is $f(x) = 4(x + 4)x$ negative?

PREVIEW

Preview - the full worksheet and its answer key are at primeworksheet.com