Quadratic - Factored Form #2
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Question 1
Determine the **entire interval** over which the following function is **increasing**:

$$f(x)=\frac{1}{2}(x+3)(x+15)$$

Question 2
Determine the rule of a **quadratic function in factored form** given the following information:

- the x-intercepts are -3 and 5
- the y-intercept is 45

Question 3
Determine the rule of a **quadratic function in factored form** given the following information:

- the zeros are (3,0) and (6,0)
- it passes through the point (5,12)

Question 4
Determine the **coordinates of the minimum** of the following quadratic function:

$$y=\frac{1}{7}(x-2)(x+12)$$

Question 5
Determine the **entire interval** over which the following function is **increasing**:

$$f(x)=\frac{1}{7}(x+4)(x-10)$$

Question 6

Determine the rule of a **quadratic function in factored form** given the following information:

- the zeros are (-4,0) and (8,0)
- it passes through the point (2,-18)

Question 7

Determine the rule of a **quadratic function in factored form** given the following information:

- the zeros are (-4,0) and (6,0)
- it passes through the point (5,18)

Question 8

Determine the rule of a **quadratic function in factored form** given the following information:

- the zeros are (-2,0) and (4,0)
- it passes through the point (5,14)

Question 9

Determine the rule of a **quadratic function in factored form** given the following information:

- the x-intercepts are -2 and 4
- the y-intercept is 16

Question 10

Determine the **entire interval** over which the following function is **increasing**:

$$f(x)=\frac{1}{5}(x-1)(x+9)$$