Quiz: HSA.APR.D.7

1. What is the sum of the terms shown below?

$$\frac{1}{x^2+x-6}-\frac{2}{x^2-x-2}+\frac{3}{x^2+4x+3}=\_\_\_\_\_$$

Write your answer in simplest terms in the space provided. Leave the denominator in factored form.

2. In the equation below, each rational expression is in simplest terms.

If $a < b$, what values for a and b make the equation true?

$$\frac{10x-b}{x^2+x-20}\cdot\frac{x+a}{3x-9}=\frac{10}{3(x+5)}$$

$a =$ ____

$b =$ ____

Write your answers in the spaces provided.