

Vector Subtraction - Guided Lesson Explanation**Explanation #1**

Subtracting Vectors = $u - v = u + (-v)$

In terms of the vector

$$u + (-v) = (5, 7) + (-13, -3)$$

$$u - v = (5, 7) - (13, 3)$$

$$u - v = (5-13, 7-3)$$

$$u - v = (-8, 4)$$

Explanation #2

In terms of the vector

$$u + (-v) = (12, 2) + (-2, -8)$$

$$u - v = (12, 2) - (2, 8)$$

$$u - v = (12-2, 2-8)$$

$$u - v = (10, -6)$$

Explanation #3

Subtract vector = $u - v = u + (-v)$

In terms of the vector

$$u = \frac{3}{5}, \quad v = \frac{2}{5}$$

$$u - v = \frac{3}{5} + -\frac{2}{5}$$

$$u - v = \frac{3}{5} - \frac{2}{5}$$

$$u - v = \frac{1}{5}$$

Answer is : $\frac{1}{5}$

