Rearranging Equations

1) \[ 5a + 4b = \frac{c}{7} + 3d \]

Rearrange the equation to make \( c \) the subject.

Find the value of \( c \), if \( a = 6, b = -5, \) and \( d = 4 \).

2) \[ 6t^2 - 7v + 4 = 0 \]

Rearrange the equation to make \( t \) the subject.

Find the value of \( t \), if \( v = 2 \).

3) \[ \sqrt{\frac{5z + x}{4y + 3}} = 2 \]

Rearrange the equation to make \( z \) the subject.

Find the value of \( z \), if \( x = 3, y = 1 \).

4) \[ 3v - 7u = -11 \]

Rearrange the equation to make \( v \) the subject.

Find the value of \( v \), if \( u = -7 \).

5) \[ -6pq + 36 = p(q - 20r) \]

Rearrange the equation to make \( r \) the subject.

Find the value of \( r \), if \( p = 1, q = 8 \).
Rearranging Equations

1) \[5a + 4b = \frac{c}{7} + 3d\]

Rearrange the equation to make \(c\) the subject. \[c = 7(5a + 4b - 3d)\]

Find the value of \(c\), if \(a = 6\), \(b = -5\), and \(d = 4\). \(c = -14\)

2) \[6t^2 - 7v + 4 = 0\]

Rearrange the equation to make \(t\) the subject. \[t = \pm \sqrt{\frac{7v - 4}{6}}\]

Find the value of \(t\), if \(v = 2\). \(t = \pm \sqrt{\frac{5}{3}}\)

3) \[\frac{5z + x}{4y + 3} = 2\]

Rearrange the equation to make \(z\) the subject. \[z = \frac{16y - x + 12}{5}\]

Find the value of \(z\), if \(x = 3\), \(y = 1\). \(z = 5\)

4) \[3v - 7u = -11\]

Rearrange the equation to make \(v\) the subject. \[v = \frac{7u - 11}{3}\]

Find the value of \(v\), if \(u = -7\). \(v = -20\)

5) \[-6pq + 36 = p(q - 20r)\]

Rearrange the equation to make \(r\) the subject. \[r = \frac{7pq - 36}{20p}\]

Find the value of \(r\), if \(p = 1\), \(q = 8\). \(r = 1\)