

1. To find the equation of the new line, we first need the gradient of the original line. Now,

$$5y = -35, \text{ so}$$

$$y = -7$$

Hence, the gradient of the original line is $m = 0$.

The new line is parallel to the original line, so it has the same gradient as the original line. Thus the equation of the line is $y = c$ and we can substitute the coordinates of the point $(x_1, y_1) = (7, 2)$ into this equation to get the value for c .

$$2 = c.$$

Hence the equation of the line is $y = 2$.

2. To find the equation of the new line, we first need the gradient of the original line. Now,

$$-10 + 5y = 0, \text{ so}$$

$$5y = 10$$

$$y = 2$$

Hence, the gradient of the original line is $m = 0$.

The new line is parallel to the original line, so it has the same gradient as the original line. Thus the equation of the line is $y = c$ and we can substitute the coordinates of the point $(x_1, y_1) = (0, -1)$ into this equation to get the value for c .

$$-1 = c.$$

Hence the equation of the line is $y = -1$.

3. To find the equation of the new line, we first need the gradient of the original line. Now,

$$3 + 3y = 0, \text{ so}$$

$$3y = -3$$

$$y = -1$$

Hence, the gradient of the original line is $m = 0$.

The new line is parallel to the original line, so it has the same gradient as the original line. Thus the equation of the line is $y = c$ and we can substitute the coordinates of the point $(x_1, y_1) = (-5, 10)$ into this equation to get the value for c .

$$10 = c.$$

Hence the equation of the line is $y = 10$.

4. To find the equation of the new line, we first need the gradient of the original line. Now,

$$-6 = 2y, \text{ so}$$

$$-2y = 6$$

$$y = -3$$

Hence, the gradient of the original line is $m = 0$.

The new line is parallel to the original line, so it has the same gradient as the original line. Thus the equation of the line is $y = c$ and we can substitute the coordinates of the point $(x_1, y_1) = (-7, 0)$ into this equation to get the value for c .

$$0 = c.$$

Hence the equation of the line is $y = 0$.

5. To find the equation of the new line, we first need the gradient of the original line. Now,

$$28 = 7y, \text{ so}$$

$$-7y = -28$$

$$y = 4$$

Hence, the gradient of the original line is $m = 0$.

The new line is parallel to the original line, so it has the same gradient as the original line. Thus the equation of the line is $y = c$ and we can substitute the coordinates of the point $(x_1, y_1) = (1, -10)$ into this equation to get the value for c .

$-10 = c$.

Hence the equation of the line is $y = -10$.