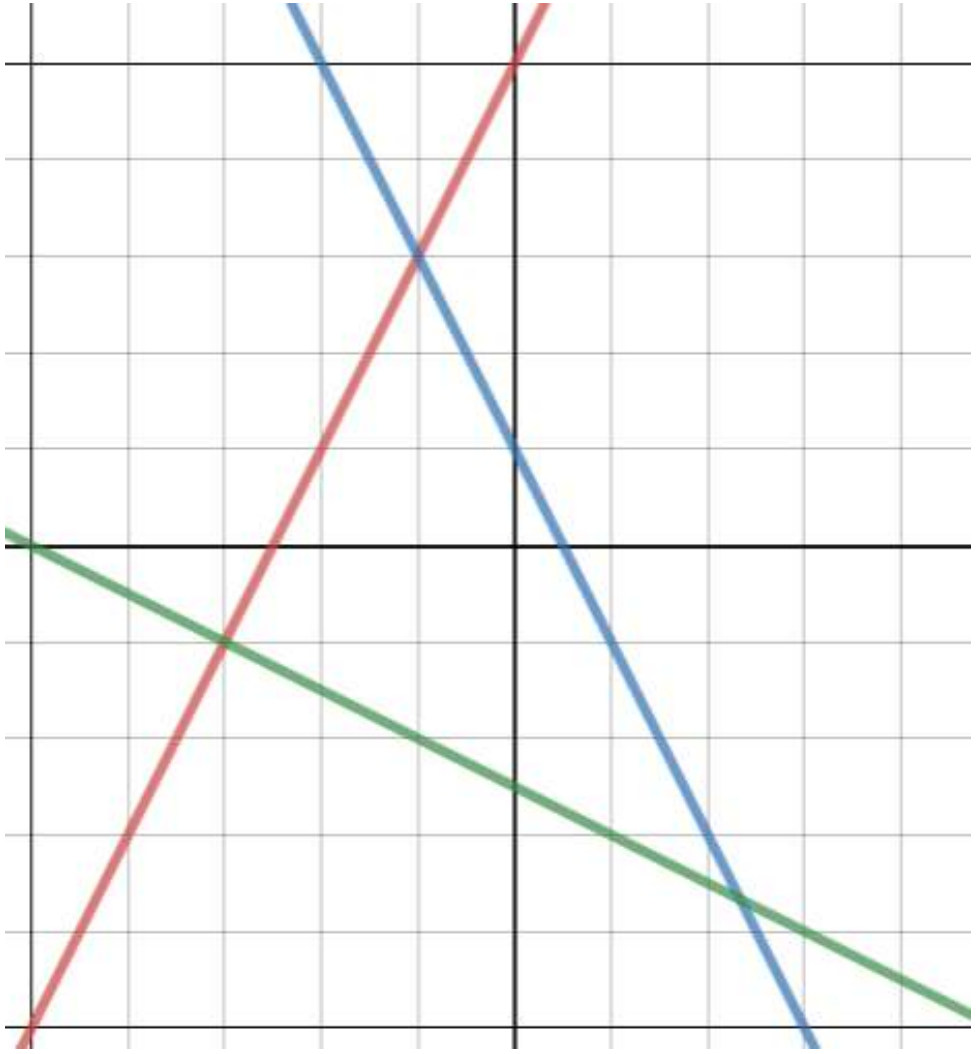
Line them up 1

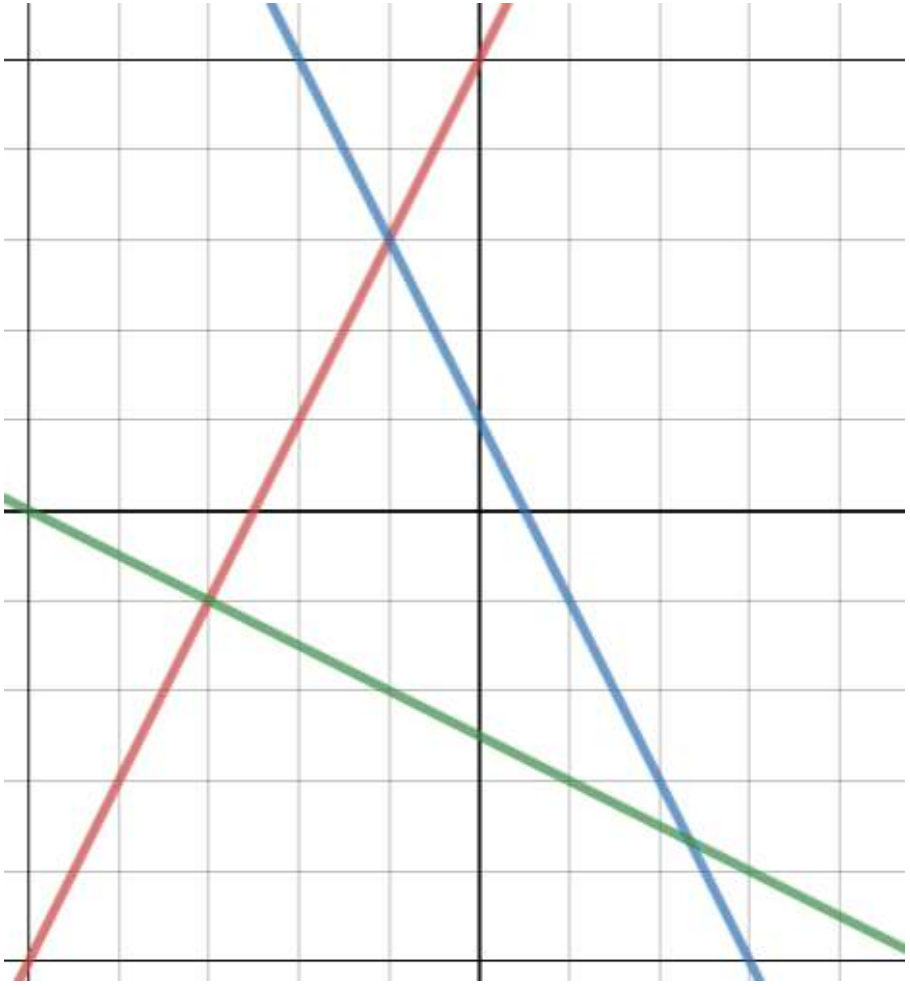


Which is which?

- $y = 2x + 5$
- $2y + x + 5 = 0$
- $y + 2x = 1$

How does rearranging enable you to justify your answer?

Line them up 1 Solution



Which is which?

- $y = 2x + 5$
- $2y + x + 5 = 0$
- $y + 2x = 1$

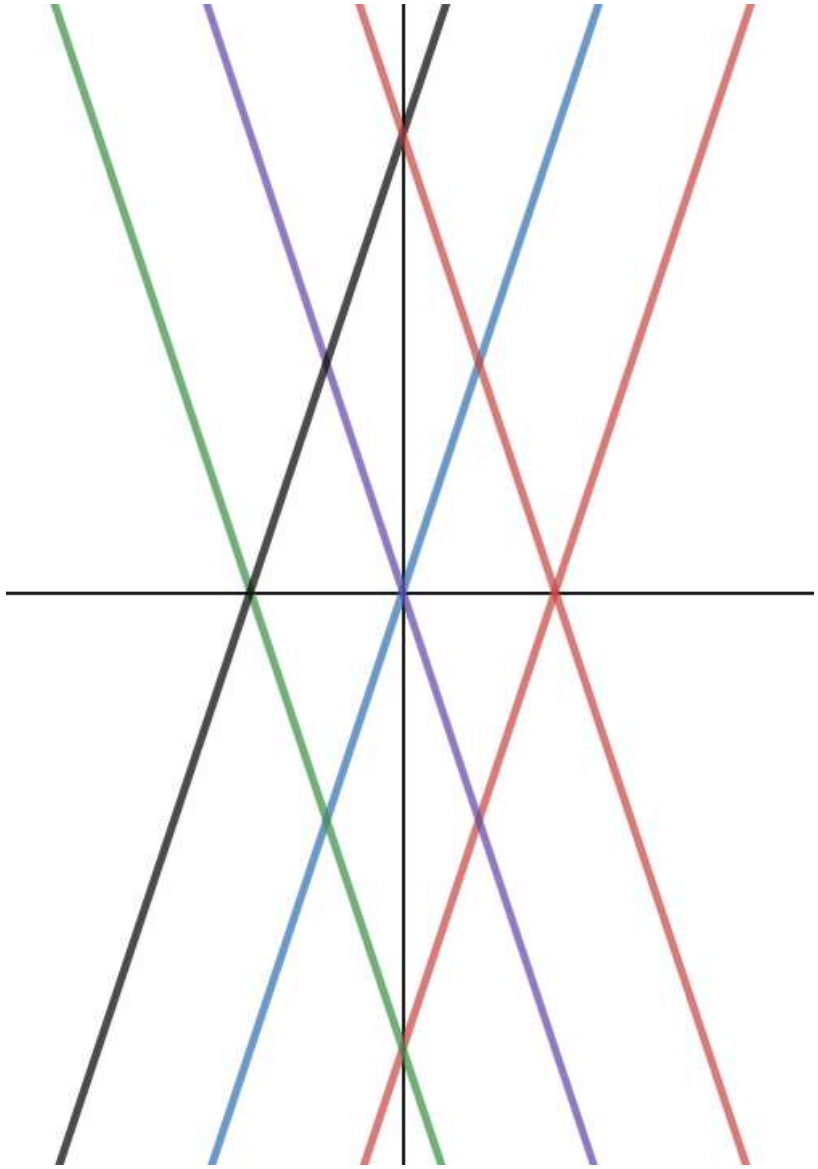
Why?

- $y = 2x + 5$
- $y = -\frac{x}{2} - \frac{5}{2}$
- $y = -2x + 1$

By rearranging into the form $\boldsymbol{y = mx + c}$ you can easily compare the gradient and intercept of each line.

Line them up 2

Label the lines with these equations.



$y = 4 - 3x$

$y + 3x + 4 = 0$

$y + 3x = 0$

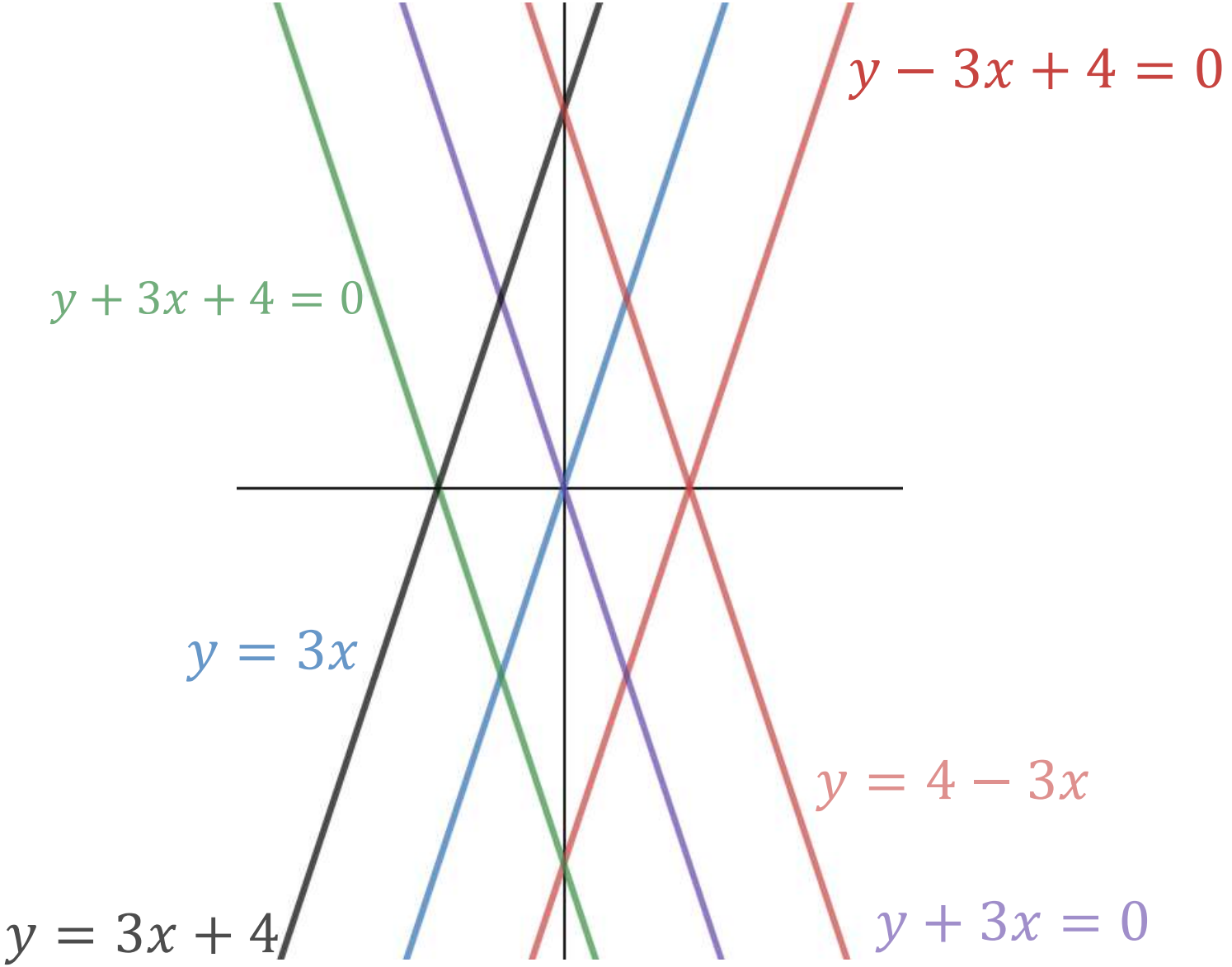
$y = 3x$

$y = 3x + 4$

$y - 3x + 4 = 0$

Line them up 2 Solution

Label the lines with these equations.



Pairing up

Can you sort the cards into pairs under the following headings:

- These lines are perpendicular
- These lines have the same x intercept
- These lines have the same y intercept
- These lines are parallel
- These lines go through the point (1,5)
- These lines…

$3y = 2x - 8$	$y = -(x + 8)$	$y = 4x + 4$
$2y + x = 4$	$y = 6x - 4$	$y = 8x - 3$
$y + x + 8 = 0$	$2y = 8x + 3$	$4y = x + 3$
$2y + 8 = 3x$	$y + 6x = 11$	$y + 4x + 6 = 0$

Pairing up Solution

Can you sort the cards into pairs under the following headings:

- These lines are perpendicular

$4y = x + 3$	$y + 4x + 6 = 0$

- These lines are parallel

$y = 4x + 4$	$2y = 8x + 3$

- These lines have the same y intercept

$2y + 8 = 3x$	$y = 6x - 4$

- These lines have the same x intercept

$2y + x = 4$	$3y = 2x - 8$

- These lines go through the point (1,5)

$y = 8x - 3$	$y + 6x = 11$

- These lines are the same line

$y + x + 8 = 0$	$y = -(x + 8)$