Lots of lines!

Here are the equations of 12 straight lines.

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

These 12 straight lines can be divided up into six pairs, each pair matching one of the following descriptions:

- These lines are parallel.

- These lines are perpendicular.

- These lines have the same y-intercept.

- These lines have the same x-intercept.

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

- These lines …

Can you sort them into the correct pairs and complete the final description?

Note that the x-intercept of a line is where the line crosses the x-axis.

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This resource is taken from the Standards Unit. You can download the full unit here, or just the printable card sorting pages (lines and descriptions) here.

Last updated 06-Jan-17