Equations of Parallel Lines

Decide whether each of these pairs of straight lines is parallel or not parallel:

(a) $y = 2x + 7$ and $y = 2x - 5$

(b) $y = 3x + 4$ and $y = 5x + 4$

(c) $y = 5x - 3$ and $y = 5x$

(d) $y = -4x + 1$ and $y = 4x + 2$

(e) $y = \frac{1}{2}x - 8$ and $y = 9 + \frac{1}{2}x$

(f) $y = -5 + 2x$ and $y = 5 - 2x$

(a) Parallel
(b) Not parallel
(c) Parallel
(d) Not parallel
(e) Parallel
(f) Not parallel

(a) Write down the equation of the straight line that is parallel to $y = 4x - 1$ and passes through $(0, 5)$

(b) Write down the equation of the straight line that is parallel to $y = -2x + 7$ and passes through $(0, 3)$

(c) Write down the equation of the straight line that is parallel to $y = \frac{3}{4}x - 2$ and passes through $(0, -8)$

(d) Write down the equation of the straight line that is parallel to $y = \frac{7}{2}x + \frac{1}{2}$ and passes through the origin

(a) $y = 4x + 5$
(b) $y = -2x + 3$
(c) $y = \frac{3}{4}x - 8$
(d) $y = \frac{7}{2}x$

(a) Write down the equation of the straight line that is parallel to $y = 1 - 3x$ and passes through $(0, -2)$

(b) Write down the equation of the straight line that is parallel to $y - 4x = 1$ and passes through $(0, -\frac{5}{2})$

(c) Write down the equation of the straight line that is parallel to $3x + y - 5 = 0$ and passes through $(0, 1)$

(a) $y = -3x - 2$
(b) $y = 4x - \frac{5}{2}$
(c) $y = -3x + 1$

Match the pairs of parallel lines:

$y = -7x + 3$	$y + 3x = 7$
$7 + 3x = y$	$7x + y + 3 = 0$
$7y = 7 - 21x$	$y = 3x$

$y = -7x + 3$ AND $7x + y + 3 = 0$
$7 + 3x = y$ AND $y = 3x$
$y + 3x = 7$ AND $7y = 7 - 21x$