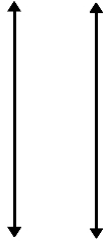
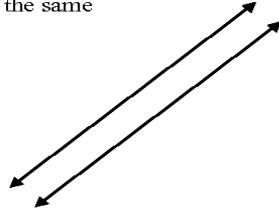


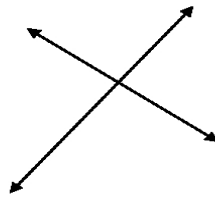
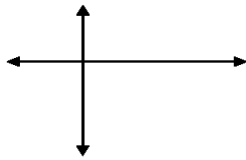
All horizontal lines are parallel
IF they don't have the same
y-intercept.



All vertical lines are par
IF they don't have the same
x-intercept.



All lines that have the SAME
SLOPE are parallel IF they
don't have the same y-
intercept.



PERPENDICULAR lines have slopes
that are NEGATIVE RECIPROCAL ;
the four angles are all 90° .

Determining if lines are parallel, perpendicular or neither from their equations:

Parallel: All the following lines are \parallel :
 $y = 2x + 3$
 $y = 2x - 3$
 $y = 2x$
 $y = 2x - 7$

Perpendicular: These pairs of lines are \perp :
 $y = 3x + 4$ and $y = -\frac{1}{3}x - 8$ and $y = -\frac{4}{5}x$ and $y = \frac{5}{4}x + 4$ and $y = x - 4$ and $y = -x - 4$

Neither:
 $y = 2x - 7$ and $y = \frac{3}{5}x + 4$
 $y = 2x - 7$ and $y = \frac{5}{3}x + 7$