TOPIC 3-6: WRITING EQUATIONS OF PARALLEL & PERPENDICULAR LINES

EXAMPLE 1

A line parallel to line to $y = \dfrac{2}{5}x + 7$ would have a slope of _____while a line perpendicular would have a slope of _____ .

EXAMPLE 2

A line parallel to line to $7x + 3y = 30$ would have a slope of _____while a line perpendicular would have a slope of _____ .

Did the y-intercept of the given line affect the parallel or perpendicular slope? _____

EXAMPLE 3

Find the equation of the line parallel to $y = \dfrac{5}{2}x - 3$ and going through the point (2,9)

EXAMPLE 4

Find the equation of the line perpendicular to $y = \dfrac{5}{2}x - 3$ and going through the point (5, -8)