

Lesson 1-4&1-5 Writing Linear Equations LO: I can write the Linear Equation of a Line in Slope Intercept, Point Slope & Standard Form when given the slope & a point on the line, or two points.

Slope Intercept Form $y = mx + b$	Point Slope Form $y - y_1 = m(x - x_1)$	Standard Form $ax + by = c$
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Note: When writing an equation of a line you first use Slope Intercept or Point Slope Form & then you rewrite into Standard Form.

Ex.1 - Writing an equation of a line in Slope Intercept & Standard Form with the Given Information

Use the given information to write the equation of a line in **a)** slope-intercept form and **b)** standard form

1. slope = -3 , $(2, -5)$

a)

b)

2. slope = 2 , $(-3, 10)$

a)

b)

3. $(-1, -5)$, $(1, 3)$ slope = _____ =

a)

b)

4. $(-10, -12)$, $(2, -6)$ slope = _____ =

a)

b)

5. $(3, -1)$, $(-2, 4)$ slope = _____ =

a)

b)

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Ex.2 - Writing an Equation of a Line that is Either Parallel or Perpendicular to a given equation and passes Through a Given Point.

Write the equation of the line that is **a) Parallel & b) Perpendicular** to the given equation of a line and passes through the point

6. $y = 2x + 1$, $(4, 3)$

a) Parallel Line

use $(4, 3)$, $m =$

b) Perpendicular Line

use $(4, 3)$, $m =$

7. $6x + 2y = 4$, $(-3, 5)$

a) Parallel Line

use $(-3, 5)$, $m =$

b) Perpendicular Line

use $(-3, 5)$, $m =$

8. $-3x + 6y = 12$, $(-8, -2)$

a) Parallel Line

use $(-8, -2)$, $m =$

b) Perpendicular Line

use $(-8, -2)$, $m =$

Short Summary #2

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