SLOPE INTERCEPT FORM

$y = mx + b$

m → SLOPE, b → Y-INTERCEPT

(1) $y = 8x + 2$

m = 8, y-INT: 2, (0, 2)

(2) $20x + 4y = 12$

$4y = -20x + 12$

$\frac{4}{4}y = \frac{-20}{4}x + \frac{12}{4}$

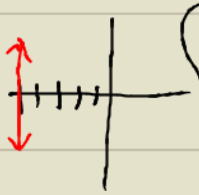
$y = -\frac{11}{2}x + 3$

$m = -\frac{11}{2}$, y-INT: 3, (0, 3)

(3) $y = 4$

m = 0, y-INT: 4, (0, 4)

(4) $x = -5$



m IS UNDEFINED, y-INT: NONE

(5) $y = \frac{2}{3}x - 5$

$m = \frac{2}{3}$ — UP 2, RIGHT 3

y-INT: −5

(6) $4x + y = 3$

$y = -4x + 3$

$m = \frac{-4}{1}$ — DOWN 4, RIGHT 1

y-INT: 3

(7) $3x - 2y = 4$

$3x - 4 = 2y$

$\frac{3}{2}x - \frac{4}{2} = \frac{2}{2}y$

$\frac{3}{2}x - 2 = y$

$m = \frac{3}{2}$ — UP 3, RIGHT 2

y-INT: −2

(8) SLOPE $= \frac{5}{3}$, y-INT: −2

FINDING EQUATION OF LINE

STEP 1: FIND m

$m = \frac{5}{3}$

STEP 2: FIND b

$b = -2$

STEP 3: WRITE ANSWER

$y = mx + b$

$y = \frac{5}{3}x - 2$

(9) SLOPE IS 0, y-INT: −5

1. $m = 0$
2. $b = -5$
3. $y = mx + b$

$y = 0x - 5$

$y = -5$

(10) SLOPE IS UNDEFINED, X-INT: 2

$x = 2$