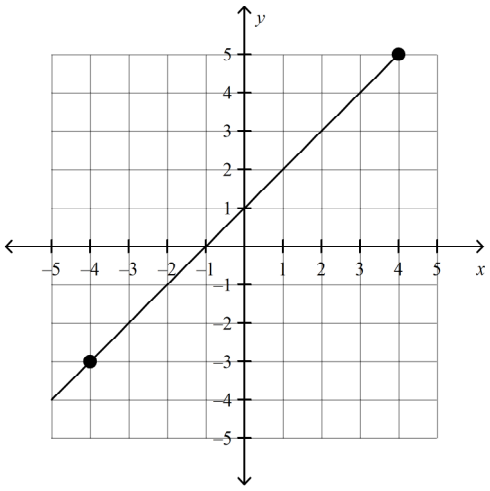
Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Point-slope 01 Class Time Examples

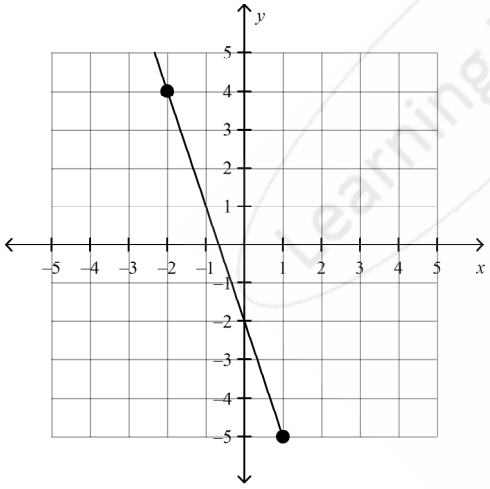
What is an equation of the line?

____ 1.



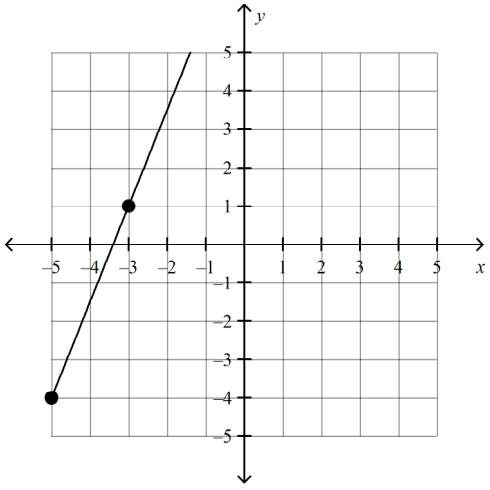
a. $y + 3 = (x + 4)$
b. $y - 3 = 2(x - 4)$
c. $y + 3 = -(x - 4)$
d. $y + 5 = 2(x + 4)$

____ 2.



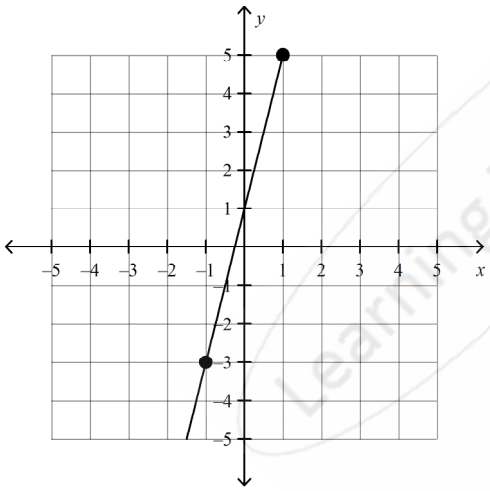
a. $y - 4 = -3(x + 2)$
b. $y - 4 = -\frac{1}{3}(x + 2)$
c. $y - 2 = -2(x + 4)$
d. $y - 5 = 3(x + 2)$

____ 3.



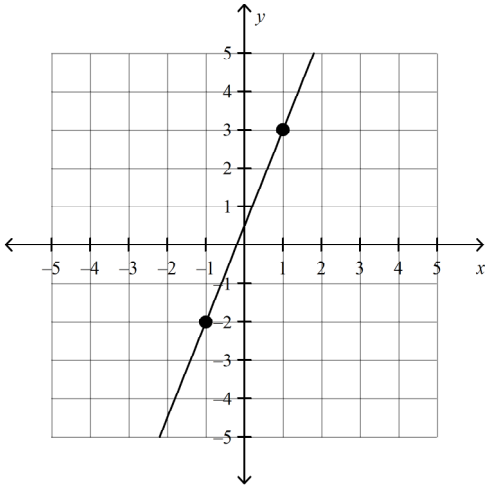
a. $y + 1 = -0.4(x + 5)$
b. $y + 4 = -2.5(x + 5)$
c. $y + 4 = 2.5(x + 5)$
d. $y + 1 = -0.4(x - 3)$

____ 4.



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

____ 5.



a. $y + 2 = -\frac{5}{2}(x - 1)$

b. $y + 2 = \frac{5}{2}(x + 1)$

c. $y + 3 = \frac{2}{5}(x + 1)$

d. $y - 2 = \frac{2}{5}(x - 1)$

____ 6. The table shows the height of a plant as it grows. What equation in point-slope form gives the plant's height at any time? Let y stand for the height of the plant in cm and let x stand for the time in months.

Time (months)	Plant Height (cm)
3	15
5	25
7	35
9	45

a. $y - 15 = \frac{5}{2}(x - 3)$

b. $y - 15 = 5(x - 3)$

c. $y - 3 = \frac{5}{2}(x - 15)$

d. The relationship cannot be modeled.

____ 7. The table shows the height of an elevator above ground level after a certain amount of time. Model the data with an equation. Let y stand for the height of the elevator in feet and let x stand for the time in seconds.

Time (s)	Height (ft)
10	202
20	184
40	148
60	112

a. $y = -1.8 + 202$
b. $y = -1.8x + 220$
c. $y = 220x - 1.8$
d. $y = 10x + 202$

____ 8. The table shows the height above the ground of a helicopter taking off from the top of a building. What equation in point-slope form gives the helicopter's height at any time? Let y stand for the height of the helicopter in m and let x stand for the time in seconds.

Time (s)	Height (m)
3	24
5	40
7	56
9	72

a. $y - 24 = 8(x - 3)$
b. $y - 3 = 4(x - 24)$
c. $y - 24 = 4(x - 3)$
d. The relationship cannot be modeled.

Point-slope 01 Class Time Examples
Answer Section

1. ANS: A PTS: 1 DIF: L3 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 3 Using Two Points to Write an Equation
   KEY: point-slope form
2. ANS: A PTS: 1 DIF: L3 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 3 Using Two Points to Write an Equation
   KEY: point-slope form
3. ANS: C PTS: 1 DIF: L3 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 3 Using Two Points to Write an Equation
   KEY: point-slope form
4. ANS: D PTS: 1 DIF: L3 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 3 Using Two Points to Write an Equation
   KEY: point-slope form
5. ANS: B PTS: 1 DIF: L3 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 3 Using Two Points to Write an Equation
   KEY: point-slope form
6. ANS: B PTS: 1 DIF: L3 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 4 Using a Table to Write an Equation
   KEY: point-slope form
7. ANS: B PTS: 1 DIF: L3 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 4 Using a Table to Write an Equation
   KEY: point-slope form
8. ANS: A PTS: 1 DIF: L4 REF: 5-4 Point-Slope Form
   OBJ: 5-4.1 To write and graph linear equations using point-slope form
   NAT: CC A.SSE.1.a| CC A.SSE.2| CC A.CED.2| CC F.IF.4| CC F.IF.7.a| CC F.BF.1.a| CC F.BF.3| CC F.LE.2| CC F.LE.5| A.2.a| A.2.b TOP: 5-4 Problem 4 Using a Table to Write an Equation
   KEY: point-slope form