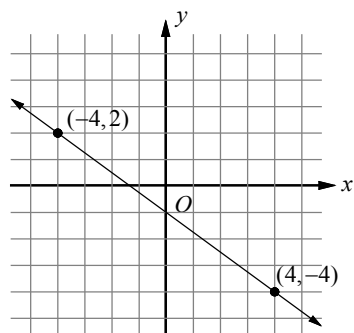**Exercises - Slope-Intercept Form and Point-Slope Form**

Questions 1-3 refer to the following information.

The graph of a linear equation is shown in the diagram above.

1

Which of the following is the equation of the line in point-slope form?

A) $y+4=-\dfrac{4}{3}(x-4)$

B) $y-4=-\dfrac{4}{3}(x+4)$

C) $y-2=-\dfrac{3}{4}(x+4)$

D) $y+2=-\dfrac{3}{4}(x-4)$

2

Which of the following is the equation of the line in slope-intercept form?

A) $y=-\dfrac{3}{4}x+1$

B) $y=-\dfrac{3}{4}x-1$

C) $y=-\dfrac{4}{3}x+1$

D) $y=-\dfrac{4}{3}x-1$

3

Which of the following is the equation of the line in standard form?

A) $4x-3y=-4$

B) $4x+3y=-4$

C) $3x-4y=-4$

D) $3x+4y=-4$

4

In 2005, 120 students at Lincoln High School had smart phones. By 2010, 345 students in the same school had smart phones. Which of the following best describes the annual rate of change in the number of smart phones students had from 2005 to 2010 at Lincoln High School?

A) The average increase in the number of smart phones per year is 40.

B) The average increase in the number of smart phones per year is 45.

C) The average increase in the number of smart phones per year is 50.

D) The average increase in the number of smart phones per year is 55.

5

Which of the following is the equation of the line that passes through point $(4,-1)$ and has slope -2 ?

A) $x+2y=2$

B) $x-2y=6$

C) $2x-y=9$

D) $2x+y=7$