

*Some Questions Sourced From Khan Academy

No Calculator

1. Which of the following is an equation of the line in the xy -plane that passes through the point $(3, -4)$ and is perpendicular to the line with equation $y = (1/4)x - 7$?
 - A) $y = -(1/4)x + 8$
 - B) $y = (1/4)x - 8$
 - C) $y = -4x + 8$
 - D) $y = -4x - 8$
2. Which of the following is an equation of the line in the xy -plane that passes through the point $(-5, 3)$ and is perpendicular to the line with equation $y = -(1/8)x + 6$?
 - A) $y = -(1/8)x + 43$
 - B) $y = 8x + 43$
 - C) $y = -(1/8)x - 43$
 - D) $y = 8x - 43$
3. Which of the following is an equation of the line in the xy -plane that passes through the point $(-1/2, 2)$ and is parallel to the line with equation $y = -8x + 3$?
 - A) $y = (1/8)x + 4$
 - B) $y = (1/8)x + 1$
 - C) $y = -8x - 2$
 - D) $y = -8x + 2$

4. Which of the following is an equation of the line in the xy -plane that passes through the point $(2, 6)$ and is parallel to the line with equation $x = (2/3)y + 2$?
- A) $y = -(2/3)x + 3$
 - B) $y = -(2/3)x - 3$
 - C) $y = (3/2)x + 3$
 - D) $y = (3/2)x - 3$
5. A line in the xy -plane passes through the point $(4, -1)$ and is perpendicular to the line with equation $y = x + 5$. Which of the following is an equation of the line?
- A) $y = x + 3$
 - B) $y = x - 3$
 - C) $y = -x + 3$
 - D) $y = -x - 3$
6. Which of the following is an equation of the line A graphed in the xy -plane that passes through the point $(-1, 3.5)$ and is *perpendicular* to the line B whose equation is $x + 4.5 = 0$?
- A) $x = -1$
 - B) $x = 3.5$
 - C) $y = 3.5$
 - D) $y = 4.5$