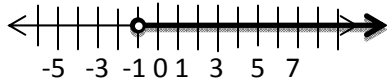


MPC 095 B: Practice Test

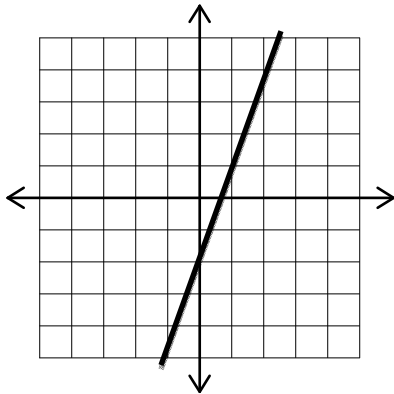
- 1) Graph the line $y = \frac{1}{3}x + 2$
- 2) Graph the line $3y - 2x = -6$
- 3) Write the equation for a line perpendicular to $y = 4x - 4$ and passing through the point $(-8, -1)$
- 4) Jenna is 114 miles away from Kelsey. They are traveling towards each other. If Kelsey travels 8 mph faster than Jenna and they meet after 3 hours, how fast was each traveling?

- 5) Give interval notation to match the following graph:



- 6) Put in slope intercept form, then give the slope and y-intercept of: $7x - 4y = -9$
- 7) Find the equation (in terms of x) of the line through the points $(-3, 7)$ and $(2, -3)$
- 8) Find the slope of the line that goes through the points $(12, -4)$ and $(7, 11)$

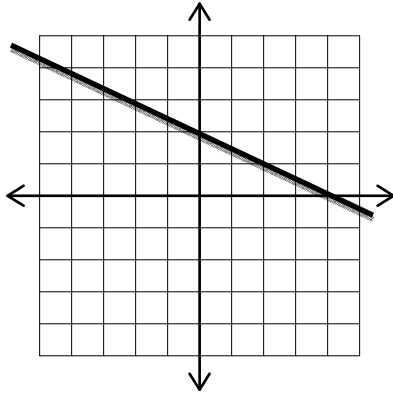
- 9)



Find the slope of the line.

- 10) Find the equation of the line passing through the points $(-32, 42)$ and $(32, -30)$. Write your answer in the form: $y = mx + b$.
- 11) Graph the line $y = 3x + 1$
- 12) Solve: $3x + 2 < -4$
- 13) Graph the inequality: $-16x + 8 > 2x - 4(5x - 4)$
- 14) Find an equation for the line perpendicular to $4x + 40y = 280$ and goes through the point $(-1, -7)$. Write your answer in the form: $y = mx + b$.
- 15) Brianna went to the library traveling 6 mph and returned home traveling 8 mph. If the total trip took 7 hours, how long did Brianna travel at each speed?
- 16) Solve: $-4 < 5x - 8 \leq 2$.
- 17) Valerie and Jessica both leave the study group at the same time, but in opposite direction. If Jessica travels 7 mph faster than Valerie and after 6 hours they are 186 miles apart, how fast is each traveling?
- 18) Write an equation for a line perpendicular to $2y - 8x = -10$ and passing through the point $(-8, 4)$.

19)



What is the slope of the graph? Leave your answer as a reduced fraction.

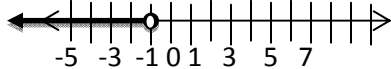
20) Find an equation for the line parallel to $3y + 6x = 27$ and goes through the point $(-6, -8)$.

Write your answer in the form: $y = mx + b$.

21) Write an equation for the line parallel to $y = 3x + 4$ and passes through the point $(4, 15)$

22) Solve $-5 - 3x > -7$

23) Give interval notation to match the following graph:



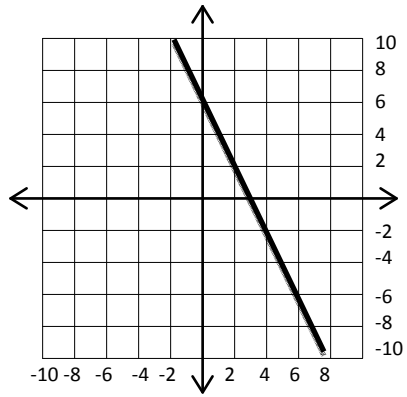
24) Solve: $-5 < 3 - 5x < 2$

25) Graph the inequality: $-7x - 8 < 3x - 6(2x + 2)$

26) Natasha left the coffee shop traveling 24 mph. Then, 2 hours later, Paige left traveling the same direction at 32 mph. How long until Paige catches up with Natasha?

27) Graph the line: $3y + 2x = 3$

28)



Write an equation for the graph