

Name KEY

Date _____

(*) Odds or Evens
Must do #19

LESSON 4.2

Practice A

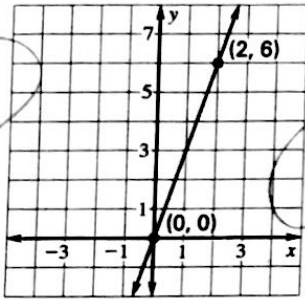
For use with the lesson "Use Linear Equations in Slope-Intercept Form"

Write an equation of the line that passes through the given point and has slope m .

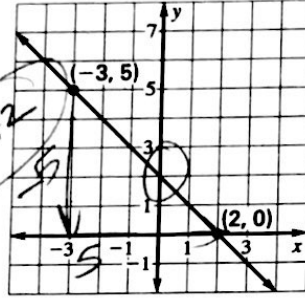
1. $(0, 8); m = 3$ $y = 3x + 8$ 2. $(5, 1); m = 4$ $y = 4x - 19$ 3. $(-4, 3); m = 2$ $y = 2x + 11$
 4. $(6, -1); m = 9$ $y = 9x - 55$ 5. $(3, 4); m = \frac{1}{2}$ $y = \frac{1}{2}x + \frac{5}{2}$ 6. $(8, 2); m = -4$ $y = -4x + 34$

Write an equation of the line shown.

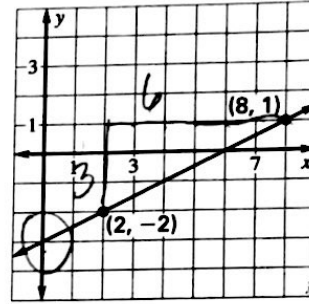
7.



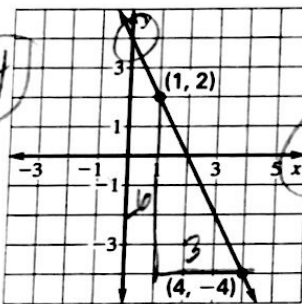
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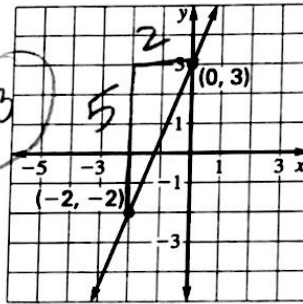
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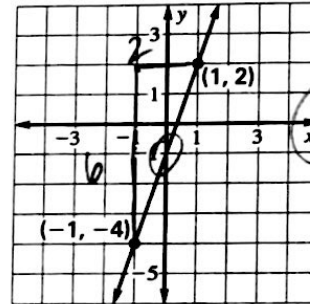
10.



11.



12.



Write an equation of the line that passes through the given points.

13. $(0, 0), (4, -20)$

$$\frac{-20 - 0}{4 - 0} = \frac{-20}{4} = -5$$

$$y = -5x$$

14. $(-7, 0), (4, 11)$

$$\frac{11 - 0}{4 - (-7)} = \frac{11}{11} = 1$$

$$y = x + 7$$

15. $(4, -2), (8, -5)$

$$\frac{-5 - (-2)}{8 - 4} = \frac{-3}{4}$$

$$y = -\frac{3}{4}x + 1$$

19. **Tae Kwon Do** You are taking a Tae Kwon Do class that costs \$15 a month. In addition, you needed to purchase a uniform. You paid a total of \$108 after 6 months. Write an equation that gives the total cost (in dollars) as a function of the length of time you have been taking classes (in months). Find the total cost after 9 months.

$$y = 15x + 18 \quad \text{when } x = 9$$

$$15(9) + 18$$

$$135 + 18$$

$$\text{\$153}$$

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LESSON 4.2

Name _____

Date _____

LESSON
4.3

Practice A

For use with the lesson "Write Linear Equations in Slope-Intercept Form"

(*) Odds or Evens
Must do #34

Find the slope of the line that passes through the given points.

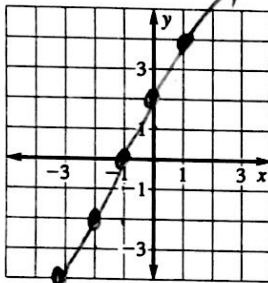
1. (6, 10), (4, 1) $9/2$ 2. (-2, 5), (7, 12) $7/9$ 3. (-3, -3), (5, -2) $1/8$
 4. (3, 9), (-2, 6) $3/5$ 5. (-7, 1), (-1, 7) 1 6. (10, -2), (7, -2) 0

Write an equation in point-slope form of the line that passes through the given point and has the given slope m .

7. (2, 2); $m = 5$ $y - 2 = 5(x - 2)$ 8. (7, 3); $m = -1$ $y - 3 = -1(x - 7)$ 9. (0, -4); $m = 3$ $y + 4 = 3x$
 10. (-1, 7); $m = 4$ $y - 7 = 4(x + 1)$ 11. (-8, -5); $m = 6$ $y + 5 = 6(x + 8)$ 12. (4, -9); $m = 2$ $y + 9 = 2(x - 4)$

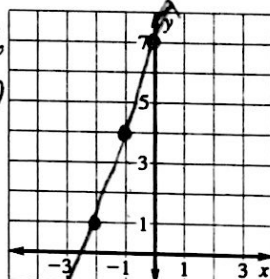
Graph the equation.

13. $y - 4 = 2(x - 1)$



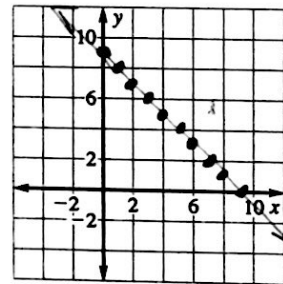
$y - 4 = 2x - 2$
 $y = 2x + 2$

14. $y - 1 = 3(x + 2)$



$y - 1 = 3x + 6$
 $y = 3x + 7$

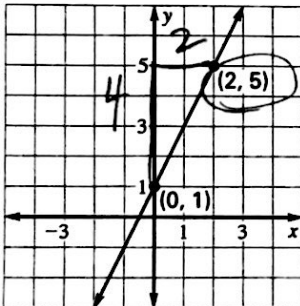
15. $y - 5 = -1(x - 4)$



$y - 5 = -x + 4$
 $y = -x + 9$

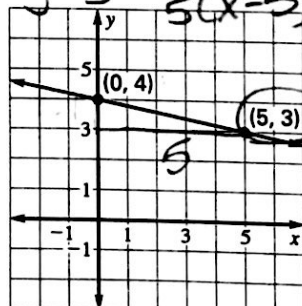
Write an equation of the line shown. Use the right-hand point to write the equation.

22.



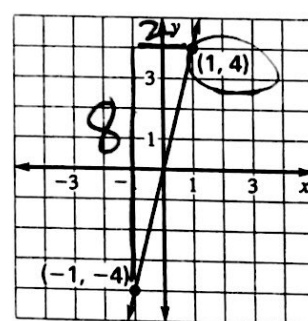
$m = \frac{4}{2} = 2$
 $y - 5 = 2(x - 2)$

23.



$m = -\frac{1}{5}$
 $y - 3 = -\frac{1}{5}(x - 5)$

24.



$m = \frac{8}{2} = 4$
 $y - 4 = 4(x - 1)$

Write an equation of the line that passes through the given points. Use the first point to write the equation.

28. (0, 0), (4, -12) $m = \frac{-12}{4} = -3$ $y = -3x$ 29. (4, 1), (7, 12) $\frac{12-1}{7-4} = \frac{11}{3}$ $y - 1 = \frac{11}{3}(x - 4)$
 30. (0, 5), (3, 0) $-\frac{5}{3}$ $y - 5 = -\frac{5}{3}x$ 31. (3, -2), (-2, 3) $\frac{3+2}{-2-3} = \frac{5}{-5} = -1$ $y + 2 = -1(x - 3)$

32. **Hotel Rates** You rent a hotel room for \$45 a night. The hotel adds a charge for using its parking lot to the total bill. After staying at the hotel for 3 nights, your total bill is \$150. $45 \times 3 = 135$ $150 - 135 = 15$

- a. How much of your bill was for the parking fee? $\$15$
 b. Write an equation that gives your total bill (in dollars) as a function of the number of nights you stay in the room. $y = 45x + 15$
 c. How much does it cost to stay at the hotel for 7 nights? $45(7) + 15 = 330$
 d. If your bill was \$555, how many nights did you stay at the hotel?

$555 - 15 = 540 \div 45 = 12 \text{ nights}$