Equations and Inequalities

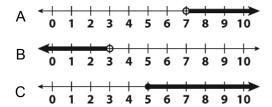
Unit Test: D

1. Keith and Jason worked 12 hours. Jason worked 3 hours. Which equation shows this situation? Use the model below to help you.

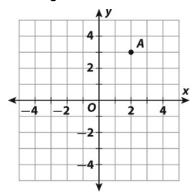
- A 12 + k = 3
- B 12k = 3
- C k + 3 = 12
- 2. Which equation is true when is x = 1?
 - A 3x = 3
 - B 3x = 2
 - C 3x = 1
- 3. Bianca scored 2 goals. Together, Bianca and Diana scored 5 goals. How many goals did Diana score?
 - A 2
 - B 3
 - C 5
- 4. A wall has an area of 40 square feet. Its height is 8 feet. Which equation could you use to find its width? Use the model below to help you.

$$| length | \times | length | = | length |$$

- A 40 w = 8
- B 8w = 40
- C 8 + w = 40
- 5. Which number line shows x > 7?



6. Where is point A located on the coordinate grid below?



- A Quadrant I
- B Quadrant II
- C Quadrant III
- 7. Mike reads 5 pages an hour. The independent variable is time. What is the dependent variable?
 - A the number of books
 - B the number of hours
 - C the number of pages
- 8. Wendy is making lemonade. Which equation shows how much lemon juice is needed for 3 ounces of water?

Water in ounces	3	6	9
Lemon juice in ounces	1	2	3

- A j=1
- B 3 + j = 1
- C i 3 = 1
- 9. Paul graphed the equation y = x. Which point does the graph not pass through?
 - A (0, 0)
 - B (5, 5)
 - C (10, 15)

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10. Tamara has 12 pencils. There are 3 red pencils and p other pencils. Complete the equation to represent this situation.

- 11. Is x + 15 = 7 true when x = 12?
- 12. Oliver had \$10. On his birthday, he received \$25. Use the equation below to find how much money Oliver has now.

10 + 25 = mequation:

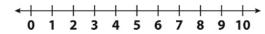
solution:

13. Greta cut a ribbon into 12 pieces. Each piece was 6 inches long. Complete and solve the equation to find the length of the ribbon she started with.

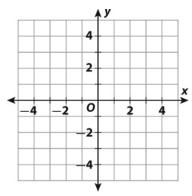
length of ribbon \div 12 = 6 equation: $x \div 12 = 6$

solution:

14. Shade the number line to show $t \le 5$.



15. Graph point (2, 4) on the coordinate plane below.



16. Tickets cost \$7 each. As the number of tickets goes up, the total cost goes up. The independent variable is shown below. What is the dependent variable? independent: number of tickets

dependent:

17. The table shows how much Eric earns. Complete the equation to show how the number of hours Eric works is related to his pay.

Hours Worked	1	2	3	4
Pay in Dollars	8	16	24	32

equation: p = () $\times h$

18. Graph the equation y = x. The first point is done for you.

