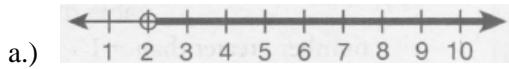


## Unit 4 Equations & Inequalities Math Whiz Mastery

1. Franklin paid \$152 for 8 DVDs. Each DVD was the same price. Which shows the equation that represents the situation and price of each DVD?      A.)  $\frac{d}{8} = 152$ ; \$1,216 per DVD      B.)  $d - 8 = 152$ ; \$160 per DVD  
C.)  $d + 8 = 152$ ; \$144 per DVD      D.)  $8d = 152$ ; \$19 per DVD
2. Gavin worked 16 hours last week and earned \$192. The equation  $16d = 192$  can be used to find  $d$ , the number of dollars earned per hour. What is Gavin's hourly wage?
3. Solve the following equation for  $a$ .  $a - 32 = 47$
4. When the temperature drops below 15 degrees Celsius in a building, the furnace turns on. Write an inequality statement and graph the solutions that represent at what temperatures the furnace turns on.
5. Cooper spent at least \$25 at a music concert. What are some possible amounts Cooper could have spent? Write an inequality to represent the amount of money Cooper spent.
6. Which of the following values is **not** a solution of  $x - 4 < 15$ ? 0, 19, 18.9,  $15\frac{1}{4}$
7. Which of the following values is a solution of  $12.6 \leq 3x$ ? 4, 4.2, 3, 10
8. Solve for  $c$ .  $\frac{c}{5} = 65$
9. Write an inequality statement and write the statement in words to represent the graphs below.



10. The table below shows song downloads and total cost.

Songs (x)	3	5	8	10	15	20
Total Cost (y)	\$4.50	\$7.50	\$12.00	\$15.00	\$22.50	\$30.00

- A. What happens to the total cost if the number of songs increase? \_\_\_\_\_
- B. What is the Independent Variable? \_\_\_\_\_ C.What is the Dependent Variable? \_\_\_\_\_
11. Which ordered pair is a solution to the equation  $y = 3x + 4$ ? \_\_\_\_\_
 

a. (0, 0)	c. (2, 10)
b. (5, 3)	d. (15, 39)
12. Yvonne reads about 20 pages a night before she goes to bed.  $n$  stands for the number of nights she has read and  $p$  stands for the total number of pages. \_\_\_\_\_ depends on \_\_\_\_\_

**Dependent Variable**

**Independent Variable**