

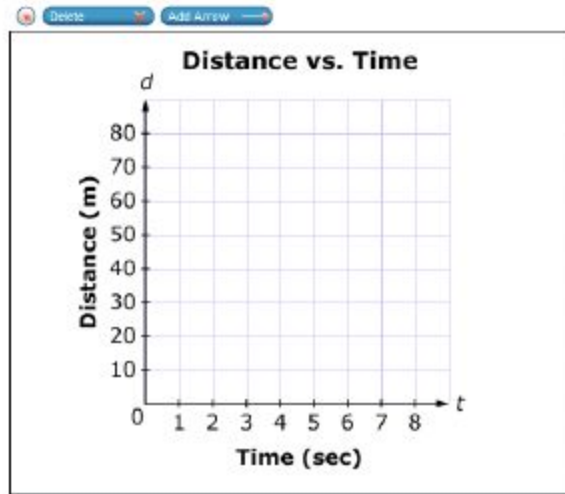
Smarter Balance Math CA Practice Test Practice

Write the value of n for the equation $5^n = 5^2 \cdot 5^8$.

The distance (d) in meters a car travels in t seconds is shown in the table.

d	t
10	1
20	2
30	3
40	4
50	5

Use the Add Arrow tool to graph the proportional relationship between the distance (d) traveled by a car and the time (t).



Select True or False to indicate whether each comparison is true.

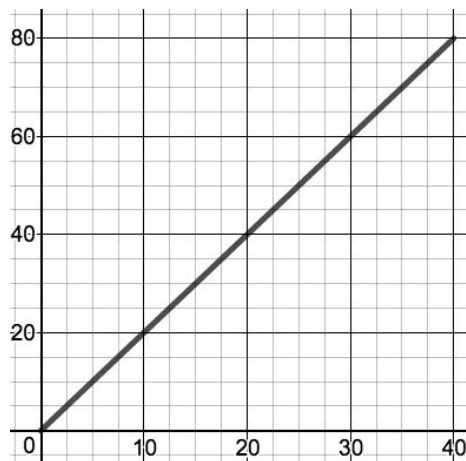
	True	False
$\sqrt{35} < 6\frac{1}{4}$		
$2\pi > 2\sqrt{3}$		
$\sqrt{3} > \frac{7}{3}$		
$\frac{15}{\sqrt{24}} < 2.98$		

Determine for each number whether it is a rational or irrational number.

	Rational	Irrational
$\sqrt{15}$		
$\frac{1}{\sqrt{4}}$		
$-2\frac{7}{3}$		
2.98		

Consider the line shown on the graph.

Write the equation of the line in the form $y = mx$ where m is the slope.



An expression is shown.

$$j^2 \left(\frac{k^6}{k^4 k^3} \right)^{-3}$$

Martha evaluates the expression using these steps:

Step 1: $j^2 \left(\frac{k^6}{k^7} \right)^{-3}$

Step 2: $j^2 (k^{-1})^{-3}$

Step 3: $j^2 k^{-4}$

Martha made a mistake. In which step did Martha first make a mistake, and what is a correct expression for that step?

(A) Step 2; $j^2 (k^1)^{-3}$

(B) Step 2; $j^2 (k^{13})^{-3}$

(C) Step 3; $j^2 k^{-2}$

(D) Step 3; $j^2 k^3$

Tracey claims that when you multiply two powers with the same base, the new exponent is the product of the original exponents. She uses the example $5^2 \cdot 5^2 = 5^4$. Add exponents to the bases below to show that Tracey's claim is incorrect.

$$5^{\square} \cdot 5^{\square} = 5^{\square}$$

Select all possible values for x in the equation $x^3 = 405$.

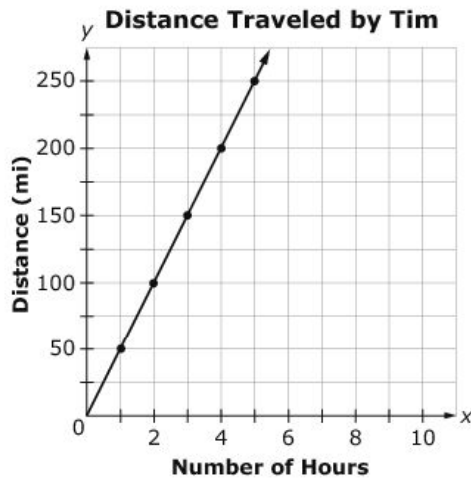
$3\sqrt[3]{5}$

$45\sqrt[3]{3}$

$3\sqrt[3]{3}$

$\sqrt[3]{405}$

This graph shows a proportional relationship between the distance traveled by Tim on a road trip and the number of hours for which he traveled.



Which statement identifies the correct slope and the correct interpretation of the slope for this situation?

- Ⓐ The slope of the line is $\frac{50}{1}$, so the distance traveled by Tim is 50 miles every hour.
- Ⓑ The slope of the line is $\frac{50}{1}$, so the distance traveled by Tim is 1 mile every 50 hours.
- Ⓒ The slope of the line is $\frac{1}{50}$, so the distance traveled by Tim is 50 miles every hour.
- Ⓓ The slope of the line is $\frac{1}{50}$, so the distance traveled by Tim is 1 mile every 50 hours.

A leaf falls 18 feet from a branch to the ground at a rate of 5 feet every 2 seconds.

Determine whether each statement about the leaf is true. Select True or False for each statement.

	TRUE	FALSE
The leaf falls at a rate of $\frac{5}{2}$ foot every 1 second.		
The initial height of the leaf is 5 feet.		
The leaf is 8 feet above the ground after 4 seconds.		

Sally is solving the linear equation $13 + 4x - 9 = 7x + 7 - 3x$. Her final two steps are:

$$4 + 4x = 4x + 7$$

$$4 = 7$$

Select the statement that correctly interprets Sally's solution.

- The solution is the ordered pair $(4, 7)$.
- The solution is $x = 0$.
- There are infinitely many solutions since $4 = 7$ is a false statement.
- There is no solution since $4 = 7$ is a false statement.

Which table of values can be defined by the function $y = 4x - 2$?

(A)

x	y
-4	-18
-2	-10
0	-2
2	6
4	14

(C)

x	y
-10	-2
-6	-1
-2	0
2	1
6	2

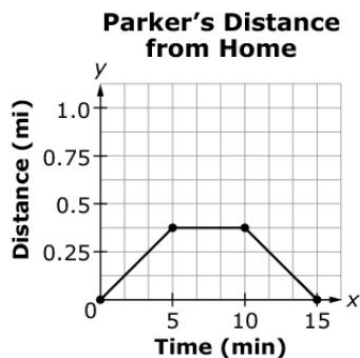
(B)

x	y
0	4
1	2
2	0
3	-2
4	-4

(D)

x	y
-2	4
0	2
2	0
4	-2
6	-4

The graph shows Parker's distance from home over time.



Based on the graph, determine whether each statement is true. Select True or False for each statement.

	TRUE	FALSE
Parker's distance from home is increasing between minute 1 and minute 4.		
Parker's distance from home is constant between minute 1 and minute 4.		
Parker's distance from home is increasing between minute 6 and minute 8.		
Parker's distance from home is increasing between minute 12 and minute 14.		