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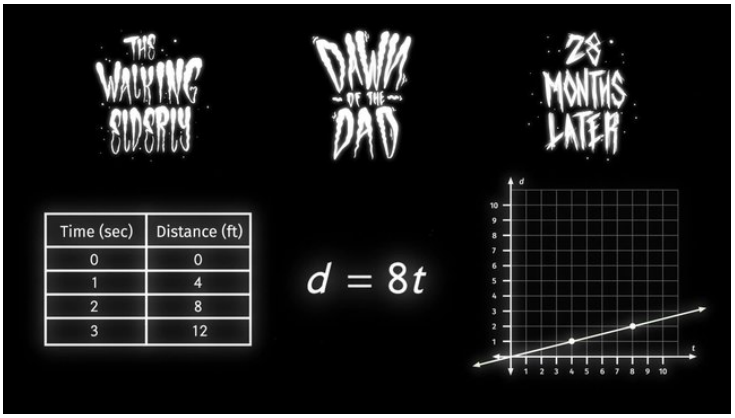
Comparing Constant Rates



1. **Order the equations from the steepest graph to the least steep graph.**
2. Convert between different representations of constant rates.
3. Compare and contrast the following linear equations.
4. Graph the constant rate equation, $y = 2x$.
5. Determine the constant rate equation for each graph.
6. Compare the constant rates represented by graphs, tables, and equations.

\+ with lots of tips, answer keys, and detailed answer explanations for all of the problems.

Order the equations from the steepest graph to the least steep graph.

Consider the steepness of the graphs of each of the equations below. Arrange each of the equations below from steepest to least steep.

A $y = \frac{1}{5}x$

B $y = \frac{1}{3}x$

C $y = x$

D $y = 4x$

E $y = 12x$

F $y = 5x$

CORRECT ORDER ☐ ☐ ☐ ☐ ☐ ☐

Hints for solving these problems

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Order the equations from the steepest graph to the least steep graph.

Hint #1

The steepness of the graph is determined by the slope. A bigger slope means a steeper graph.

Hint #2

Given an equation in the form $y = mx$, the slope is m.

Hint #3

The slope of the line $y = 10x$ is 10. The slope of the line $y = \frac{1}{9}x$ is $\frac{1}{9}$. The graph of $y = 10x$ is steeper than the graph of $y = \frac{1}{9}$.

Answers and detailed answer explanations for these problems

1 of 6

Order the equations from the steepest graph to the least steep graph.

Answer key: E, F, D, C, B, A

- The steepest line is $y = 12x$. This is because it has the largest slope, 12.
- The least steep line is $y = \frac{1}{5}x$. It has the smallest slope, $\frac{1}{5}$.
- Remember, the line $y = x$ can be written as $y = 1x$. It has a slope of 1.