

ERROR ANALYSIS Describe and correct the error in writing the equation.

19.

x	0	1	2	3
y	75	65	55	45

An equation that represents the table is $y = 75x - 10$.



20.

x	0	5	10	15
y	7	17	27	37

An equation that represents the table is $y = 7 + 10x$.



21. **✶ MAKE A REASONING** A car used 15 gallons of gasoline and traveled a total distance of 350 miles. The car's fuel efficiency is 25 miles per gallon on the highway and 20 miles per gallon in the city. Which equation can you solve to find h , the number of gallons that were used on the highway?

- (A) $350 = 25(15 - h) + 20h$ (B) $25h + 20(15 - h) = 350$
 (C) $350 = \left(\frac{25 + 20}{2}\right)h$ (D) $15 = \frac{350}{25h} + \frac{350}{20h}$

CHALLENGE Write an equation that represents the table.

22.

x	0	3	6	9
y	12	30	48	66

23.

x	4	5	6	7
y	12	19	26	33

PROBLEM SOLVING

EXAMPLE 1

on p. 34
for Exs. 24–26

24. **DAYTONA 500** A recent Daytona 500 race was won by Dale Earnhardt, Jr. He completed the 500 mile race in 3.2 hours. What was his average racing speed?

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25. **MAGLEV TRAIN** A magnetic levitation (maglev) train travels between the city center of Shanghai, China, and Pudong International Airport. The trip covers 30 kilometers in just 8 minutes. What is the average speed of the train?

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26. **SCUBA DIVING** A scuba diver is returning to the surface from a depth of 165 feet. The safe ascent rate for a diver is 30 feet per minute. How many minutes will it take for the diver to return to the surface?

EXAMPLE 2

on p. 35
for Exs. 27–28

27. **✶ MAKE A REASONING** The table shows the height of a bamboo shoot during a period of fast growth. Use the table to write an equation modeling the growth. Do you think it is reasonable to assume the pattern in the table continues indefinitely? Explain.

Day	0	1	2	3	4
Bamboo height (ft)	15	16.5	18	19.5	21