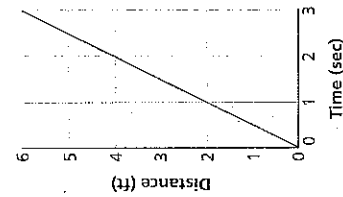


Skill: Finding Unit Rate

Find the unit rate.



10

Weight (lb)	2	4	5	9
Price (\$)	5	10	12.50	22.50

12

Distance (mi)	150	210	450	540
Time (h)	2.5	3.5	7.5	9

14 $y = 14.5x$

Skill: Solutions to Equations

Tell whether the equation has *one solution*, *no solutions*, or *infinitely-many solutions*.

16 $3t = 5t - 10$

18 $8r + 4 = 8r - 2$

20 $2d + 7 = d + 7$

22 $w - 4.8 = 94 + w$

24 $4 - 15a = a$

17 $3x + 5 = 3x - 5$

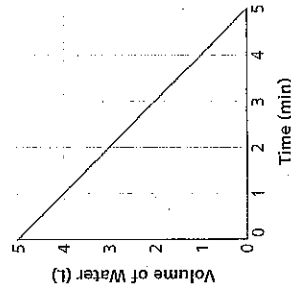
19 $g - 6 = 4g$

21 $5h = h(4 + 1)$

23 $4g + 2 = 2g + 2 + 2g$

25 $6(t - 2) = 6t - 12$

15 $y = \frac{x}{2}$



11

Height (cm)	9	36	42	60
Time (day)	3	12	14	20

13

Temperature (°F)	148	296	370	481
Time (min)	4	8	10	13

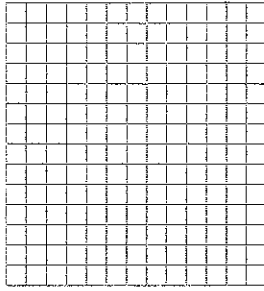
Check-Up

for use after Investigation 2
Growing, Growing, Growing

1. Ray is a contestant on a quiz show. Every time he answers a question correctly, his winnings double. If he answers the first question correctly, his winnings are \$1,000; if he answers the second question correctly, his winnings increase to \$2,000; for the third correct answer it is \$4,000, for the fourth correct answer it is \$8,000, and so on.

a. Complete the table to show Ray's winnings after each correct answer.

Correct Answers	Winnings
1	
2	
3	
4	
5	
6	
7	



b. On the grid above, graph the (Correct Answers, Winnings) data from the table.

c. Write an equation for the relationship between the number of correct answers c and the winnings w .

d. How many questions must Ray answer correctly to win \$128,000?

Simplify. Your answer should contain only positive exponents.

1) $\frac{ns}{3n^4s^3}$

3) $\frac{6h^2}{2h^5}$

4) $0z \cdot 2c^2z^2$

5) $9s^6 \cdot 2s^2y^2$

6) $\frac{4^6}{4^8}$

7) $\frac{2k^6}{7k^3}$