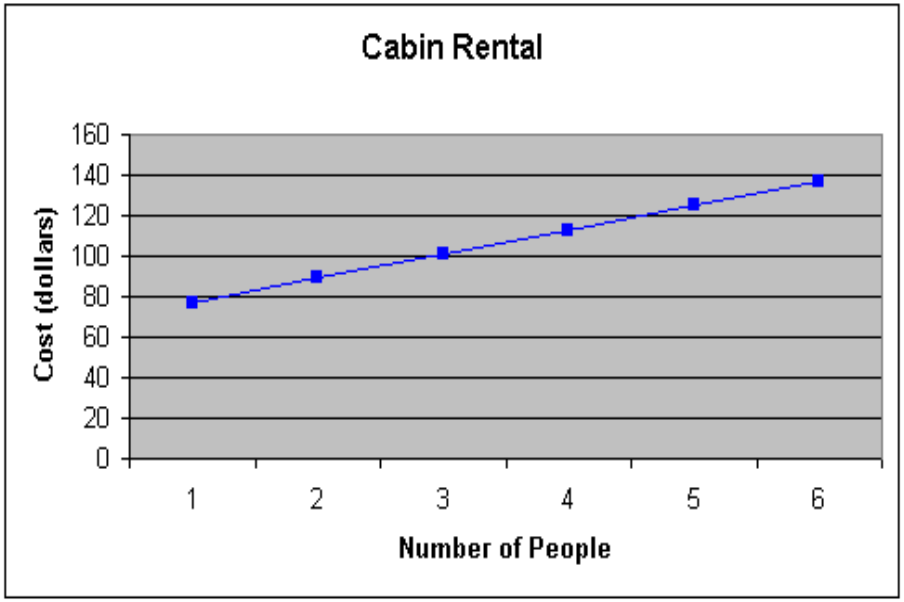
Pg. 51-53: 1-29 (o)

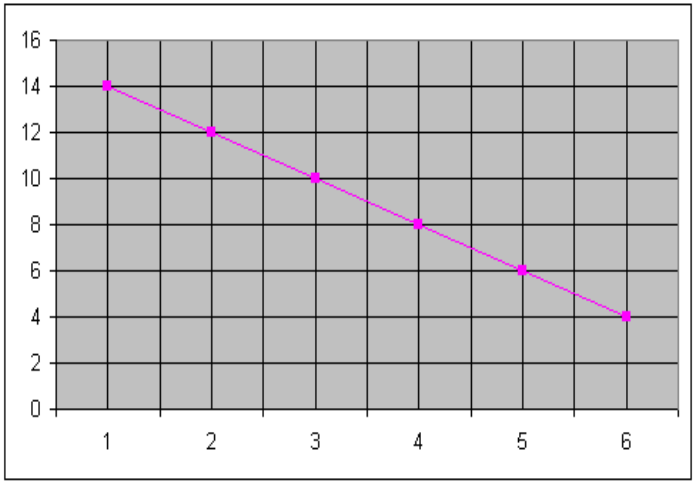
(1) input; output

(3) range

(5)



(13)



(15)

Input	Output
0	0
5	1
10	2
15	3
20	4
25	5
30	6

(17) No (19) No

(27) D (29) A

(7)

Input	Output
0	5
1	11
2	17
3	23
4	29
5	35

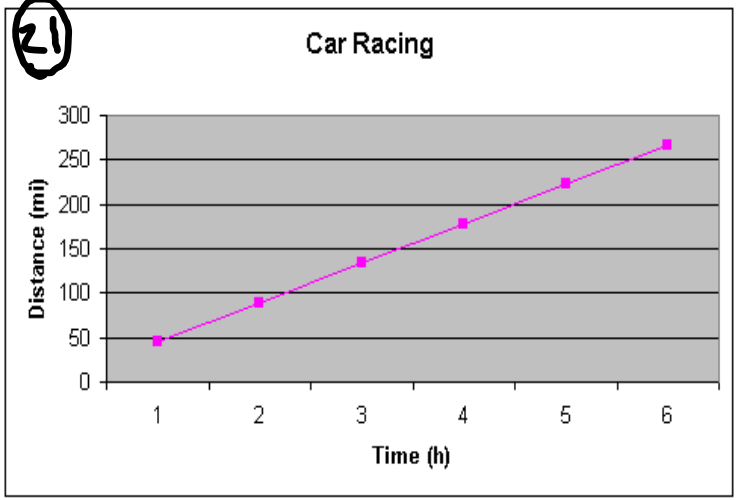
(9)

Input	Output
0	21
1	28
2	35
3	42
4	49
5	56

(11)

Input x	0	1	2	3	4	5
Output y	75	70	65	60	55	50

(21)



Review Day!

Sept. 20, 2006

State the meaning of the variable expression and name the operation.

$10 + x$	10 plus a number x	Addition
$13 - x$	13 minus a number x	subtraction
$x / 16$	a number x divided by 16	division
$24x$	24 times A number x	multiplacation

Evaluate the variable expression when $x = 3$

$7x = 7(3) = 21$

$5 + x = 5 + (3) = 8$

$12 / x = 12/(3) = 4$

$x - 2 = (3) - 2 = 1$

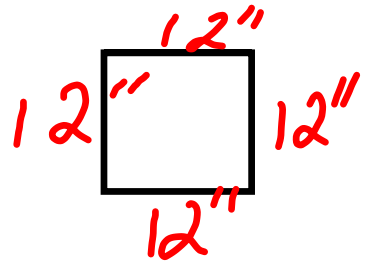
Find the distance traveled by a car moving at an average speed of 60 mph for 3 hours.

$r \cdot t = d$

$60 \cdot 3 = d$

$180 \text{ miles} = d$

Find the perimeter of a square with each side 12 inches long.



$P = s + s + s + s$

$= 12 + 12 + 12 + 12$

$= 48 \text{ in}$

Write the expression in exponential form

3 squared 3^2

x to the fourth power x^4

s cubed s^3

Evaluate the variable expression when

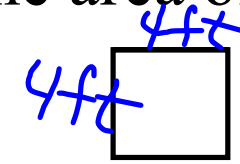
$s = 2$ and $t = 4$

$(t - s)^3 = (4 - 2)^3 = (2)^3 = 8$

$(s^2) + (t^2) = (2)^2 + (4)^2 = (4) + (16) = 20$

$(t + s)^2 = (4 + 2)^2 = (6)^2 = 36$

Find the area of a square with a side of 4 feet.



$A = s \cdot s$

$= 4ft \cdot 4ft$

$= 16\ ft^2$

Evaluate the variable expression when

$x = 2$

① $20 - 4x^2 = 20 - 4(2)^2 = 20 - 4 \cdot 4 = 20 - 16 = 4$

② $6 + 3x^3 = 6 + 3(2)^3 = 6 + 3 \cdot 8 = 6 + 24 = 30$

③ $\dfrac{2x}{x^2 - 1 + 5} = \dfrac{2(2)}{(2)^2 - 1 + 5} = \dfrac{4}{4 - 1 + 5} = \dfrac{4}{3 + 5} = \dfrac{4}{8} = \dfrac{1}{2}$

Your friend makes 4 field goals. You make three times as many field goals as your friend plus one. How many points do you have if each field goal is worth 3 points.

friend = 4 goals

you = $3 \cdot 4 + 1$

$= 12 + 1$

$= 13$ goals

$13 \cdot 3 = 39$ points

Use mental math to solve: $2 = 6 - x$

What Number subtracted from 6 equals 2? 4

Check if 3, 4, and 5 are solutions for $3n - 4 = 8$

$3(3) - 4 \stackrel{?}{=} 8$

$9 - 4 \stackrel{?}{=} 8$

$5 \neq 8$

Not a Solution

$3(4) - 4 \stackrel{?}{=} 8$

$12 - 4 \stackrel{?}{=} 8$

$8 = 8$ ✓

Solution

$3(5) - 4 \stackrel{?}{=} 8$

$15 - 4 \stackrel{?}{=} 8$

$11 \neq 8$

Not a Solution

Write these sentences as an equation.

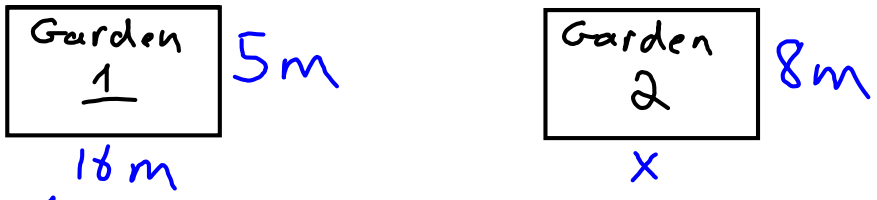
The product of 5 and a number is 25.

$5 \cdot x = 25$

The quotient of 8 and a number is 2.

$\frac{8}{x} = 2$

You want two rectangular gardens to have the same area. The first is 5 meters by 16 meters. The second is 8 meters wide. How long should the second garden be? Make a model to solve.



Step 1: Verbal Model

length of Garden 1	•	width of Garden 1	=	length of Garden 2	•	width of Garden 2

Step 2: create labels

length of Garden 1 : 16 m
width of Garden 1 : 5 m
length of Garden 2 : x m
width of Garden 2 : 8 m

Step 3: algebraic Model

$16 \cdot 5 = x \cdot 8$

$\frac{80}{8} = \frac{8x}{8}$

$10m = x$

What is the domain and range of the following.

Input	0	1	2	3
Output	0	20	40	60

Domain

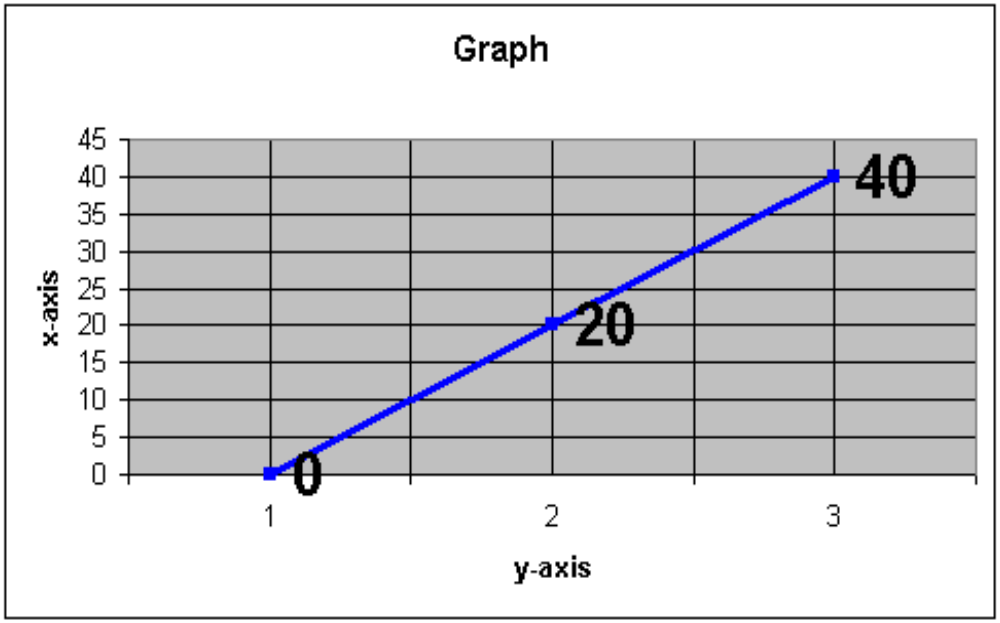
Range

Domain: {0, 1, 2, 3}

Range: {0, 20, 40, 60}

Make a function to represent the above table.

Graph the function.



Chapter Test
Sections 1.1-1.8

Thursday,
Sept. 21, 2006