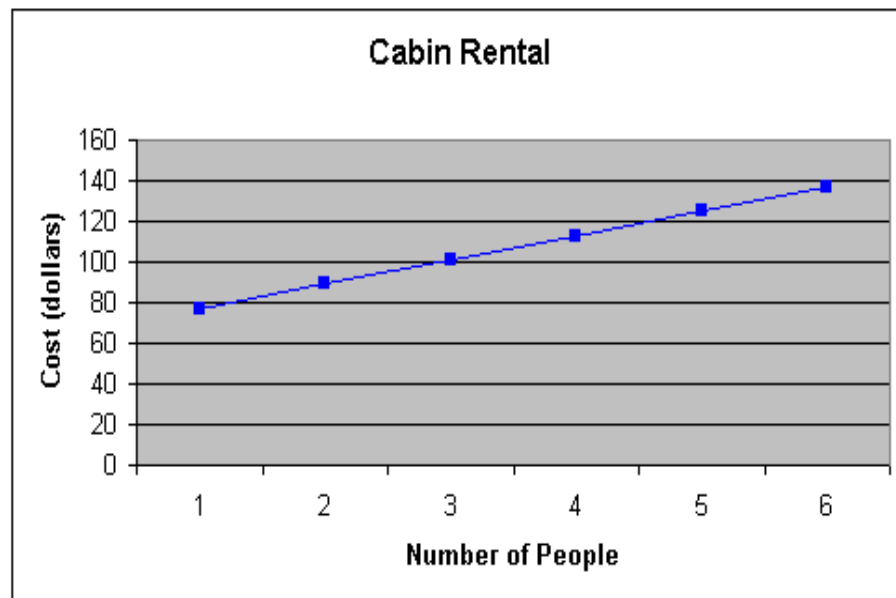


① input; output

③ range

⑤



⑦

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

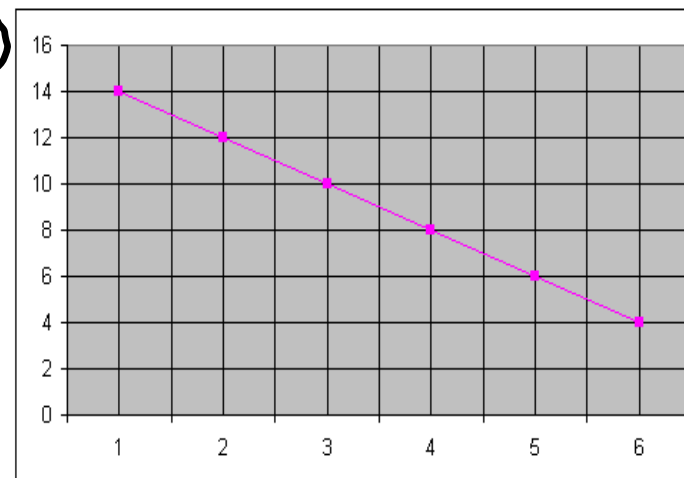
⑨

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

⑬



⑮

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

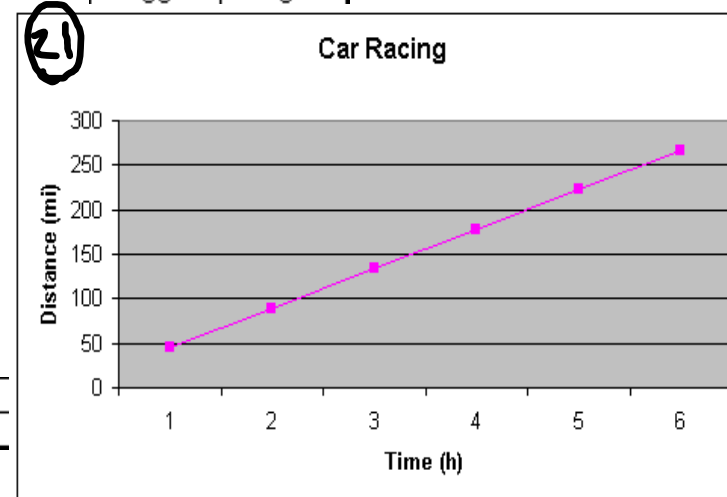
⑰ No

⑲ No

⑲ D

⑲ A

⑳



Review Day!

Oct. 02, 2006

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

$$10 + x$$

10 plus x Addition

$$13 - x$$

13 minus x Subtraction

$$x / 16$$

x divided by 16 division

$$24x$$

24 times x multiplication

Evaluate the variable expression when $x = 3$

$$7x = 7(3) = \underline{\underline{21}}$$

$$5 + x = 5 + 3 = \underline{\underline{8}}$$

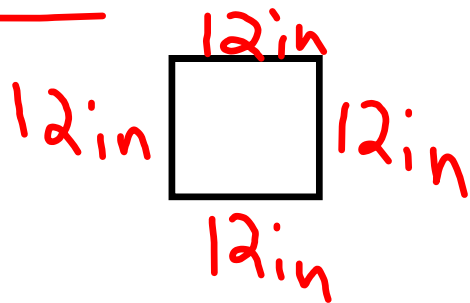
$$12 / x = \frac{12}{3} = \underline{\underline{4}}$$

$$x - 2 = (3) - 2 = \underline{\underline{1}}$$

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

$$\begin{aligned} r \cdot t &= d \\ 60 \cdot 3 &= d \\ \underline{\underline{180 \text{ miles} = d}} \end{aligned}$$

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



$$\begin{aligned} P &= s + s + s + s \\ &= 12in + 12in + 12in + 12in \\ &= \underline{\underline{48in.}} \end{aligned}$$

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

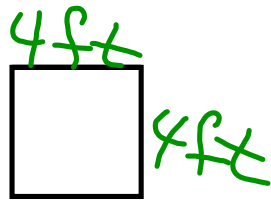
$s = 2$ and $t = 4$

$$(t - s)^3 = (4 - 2)^3 = (2)^3 = \underline{\underline{8}}$$

$$(s^2) + (t^2) = (2^2) + (4^2) = (4) + (16) = \underline{\underline{20}}$$

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

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



$$\begin{aligned} A &= l \cdot w \\ &= \underline{4 \text{ ft}} \cdot \underline{4 \text{ ft}} \\ &= \underline{\underline{16 \text{ ft}^2}} \end{aligned}$$

Evaluate the variable expression when

$$\underline{x = 2}$$

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

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

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

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

$$\begin{aligned} \text{fr} &= 4 \text{ g.} \\ 13 \cdot 3 &= 39 \text{ pts} \\ \text{You} &= 3 \cdot 4 + 1 \\ &= 12 + 1 \\ &= 13 \end{aligned}$$

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 $3n - 4 = 8$

try 3:

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

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

$$5 = 8$$

False

try 4:

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

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

$$8 = 8 \checkmark$$

True

try 5:

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

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

$$11 = 8$$

False

Write these sentences as an equation.

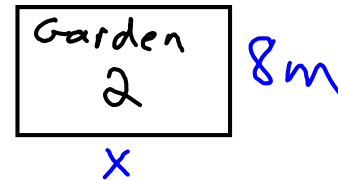
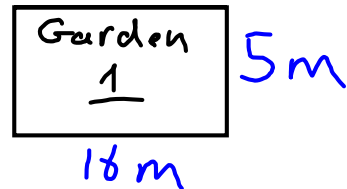
The product of 5 and a number is 25.

$$5 \cdot n = 25$$

The quotient of 8 and a number is 2.

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

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

$$\begin{array}{|c|} \hline \text{length of} \\ \hline \text{Garden 1} \\ \hline \end{array} \cdot \begin{array}{|c|} \hline \text{width of} \\ \hline \text{Garden 1} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{length of} \\ \hline \text{Garden 2} \\ \hline \end{array} \cdot \begin{array}{|c|} \hline \text{width of} \\ \hline \text{Garden 2} \\ \hline \end{array}$$

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

$$16 \cdot 5 = x \cdot 8$$

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

$$\underline{10m = x}$$

What is the domain and range of the following.

Domain

Input	0	1	2	3
Output	0	20	40	60

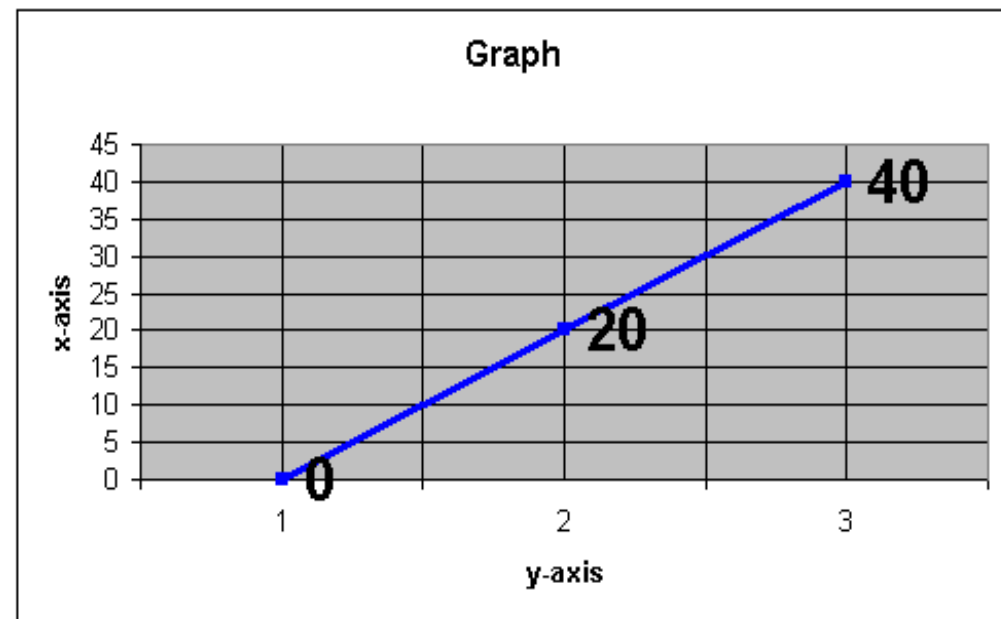
Range

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