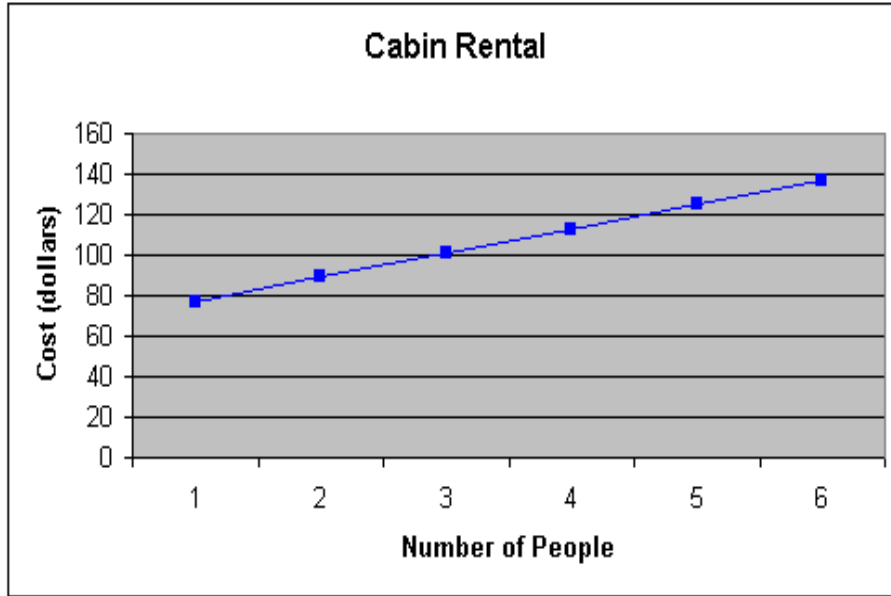


① input; output

③ range

⑤



⑦

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

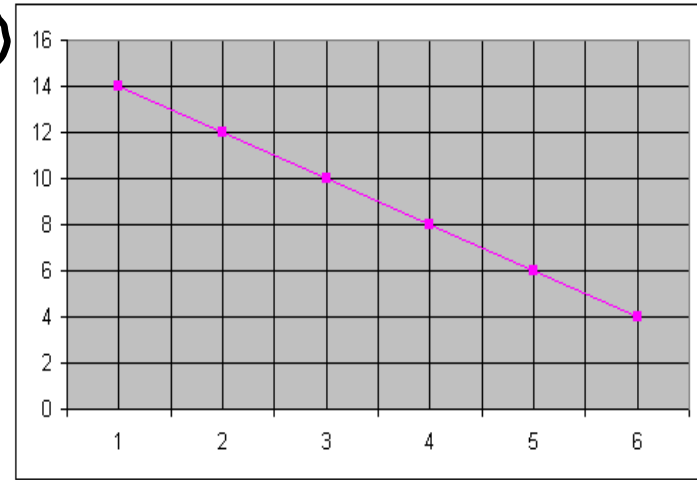
⑨

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

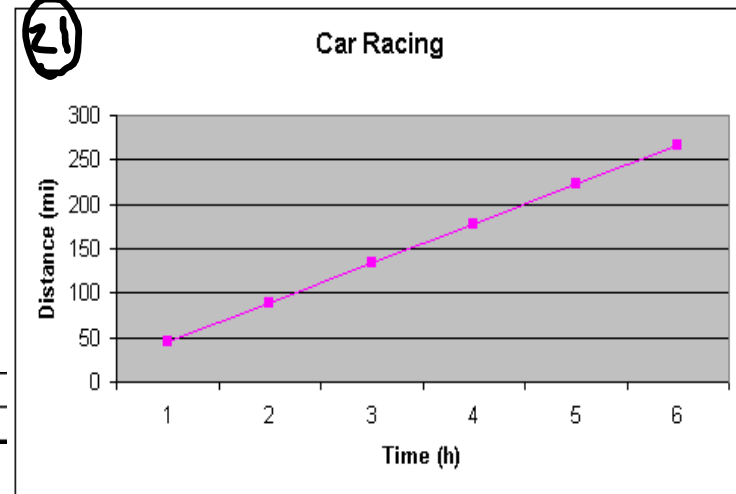
⑰. No

⑲. No

⑲. D

⑲. A

⑳



# Review Day!

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 $x$	Multiplication

---

Evaluate the variable expression when  $x = 3$

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

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

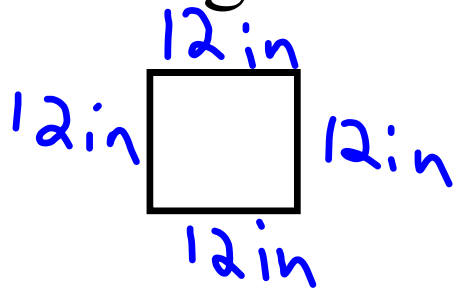
$$12 / x = \frac{12}{(3)} = \underline{\underline{4}}$$

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

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

$$r \cdot t = d$$
$$\underline{60} \cdot \underline{3} = d$$
$$\underline{\underline{180 \text{ miles} = d}}$$

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



$$P = s + s + s + s$$
$$= \underline{12 \text{ in}} + \underline{12 \text{ in}} + \underline{12 \text{ in}} + \underline{12 \text{ in}}$$
$$= \underline{\underline{48 \text{ in}}}$$

Write the expression in exponential form

3 squared

$$\underline{\underline{3^2}}$$

x to the fourth power

$$\underline{\underline{x^4}}$$

s cubed

$$\underline{\underline{s^3}}$$

Evaluate the variable expression when

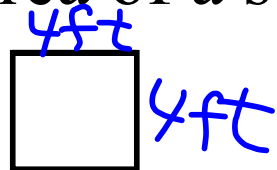
s = 2 and t = 4

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

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

$$(t + s)^2 = ((4) + (2))^2 = (6)^2 = \underline{\underline{36}}$$

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



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

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

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

$F_r = 4g$

$U = 3 \cdot 4 + 1$

$13 \cdot 3 = 39$   
39  $+ 1 = 12 + 1$   
 $= 13$

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 <u>Solution</u>	$3(4) - 4 \stackrel{?}{=} 8$ $12 - 4 \stackrel{?}{=} 8$ $8 = 8 \checkmark$ <u>Solution</u>	$3(5) - 4 \stackrel{?}{=} 8$ $15 - 4 \stackrel{?}{=} 8$ $11 \neq 8$ Not a <u>Solution</u>
---	---	---

Write these sentences as an equation.

The product of 5 and a number is 25.

$$\underline{5 \cdot x = 25}$$

The quotient of 8 and a number is 2.

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

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

$$\boxed{\text{length of Garden 1}} \cdot \boxed{\text{width of Garden 1}} = \boxed{\text{length of Garden 2}} \cdot \boxed{\text{width of Garden 2}}$$

Step 2: Create labels

$$\text{length of Garden 1} : 16 \text{ m}$$

$$\text{width of Garden 1} : 5 \text{ m}$$

$$\text{length of Garden 2} : x \text{ m}$$

$$\text{width of Garden 2} : 8 \text{ m}$$

Step 3: algebraic Model

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

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

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

What is the domain and range of the following.

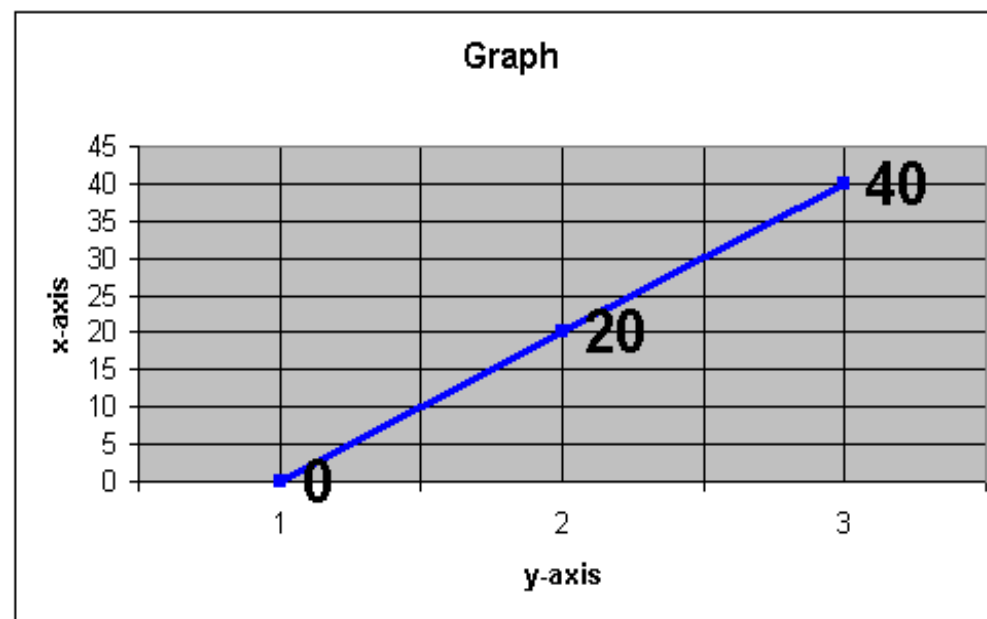
Domain	Input	0	1	2	3
Range	Output	0	20	40	60

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