Directions: Solve the following without a calculator. Show ALL work! (You may need extra paper.)

<u>Part 1 - Positive and Negative Integers (Order of Operations)</u>

a. (14 - 9)2- 27	b. -57 21
c. -27 (-358)	d. .25 (-423) + 89

<u>Part 2 - Expressions</u>

Directions: Write an expression.

a. 5 times a number minus 2	b. a number squared plus 4
c. the quotient of 25 and a number	d. the product of 8 and a number plus 12

Directions: Simplify the expression. Show ALL work! (You may need extra paper.)

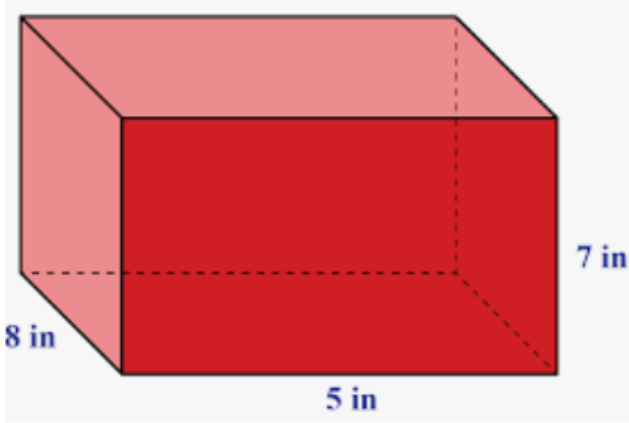|		
a. 7s + 2 + 8s - 12	b. x x 5 x	c. 3(a + b - 2)
d. 0.02x + x	e. 13(6w - 12)	f. -1.3a + 0.5 - 2.6a

Directions: Factor the expression. Show ALL work!

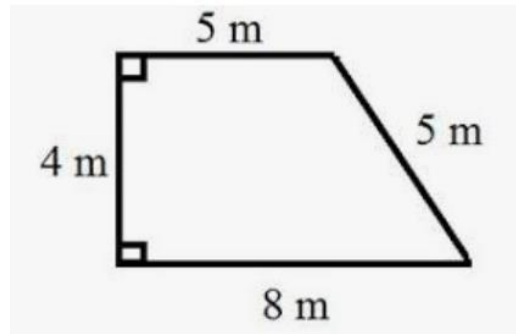| a. 7x + 14	b. 15 - 5y
c. 21a + 2b - 9	d. 2x2 + 6x

Directions: Solve the expression without a calculator. Show ALL work!

a. 65n 3 when n =- 5	b. 40 - 8x when x = 2
e. 7(a - 5) when a = -13	f. 3x2 + 7x when x = 3

Part 3 - Area, Surface Area, and Volume

Directions: Solve the following without a calculator. Show ALL work! (You may need extra paper.)

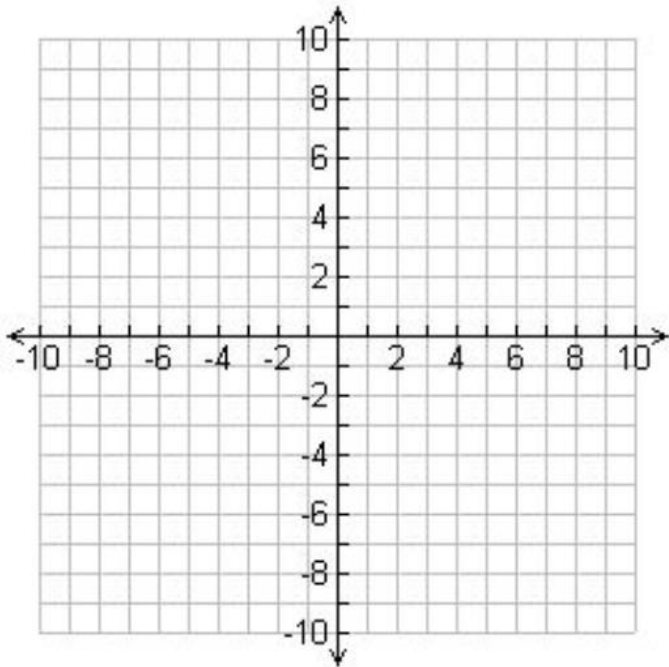| 7 in 8 in 5 in	Name the shape: Draw a net of the shape:
Calculate the surface area:	Calculate the volume:

5 m

4 m

5 m

8 m

Calculate the area:

Calculate the perimeter:

Directions: Solve the following without a calculator. Show ALL work! (You may need extra paper.)
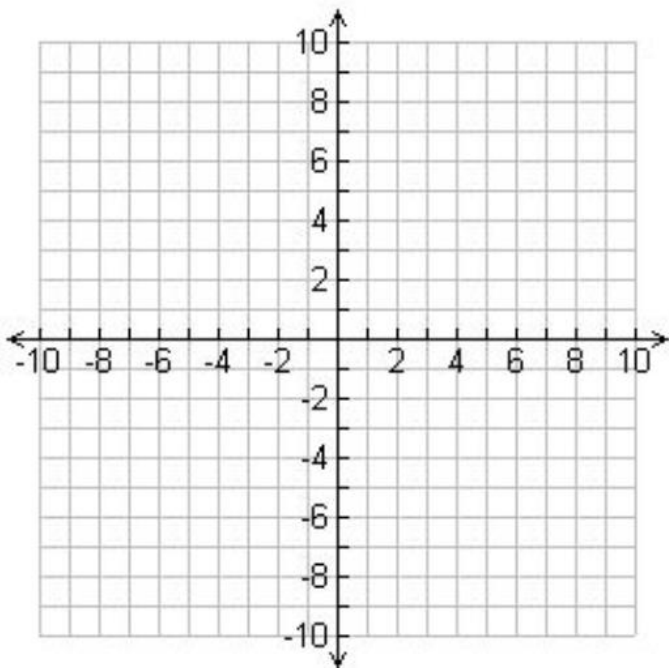

Graph the line.

Complete the function table:

x	-1	0	1	2	3
y	-4	-3	-2	-1	0

Write a function based on the table:

Find the y value if x = 8

What is the slope?

What is the y-intercept?

Graph the line.

Complete the function table:

x	-1	0	1	2	3
y	-1	1	3	5	7

Write a function based on the table:

Find the y value if x = -4

What is the slope?

What is the y-intercept?