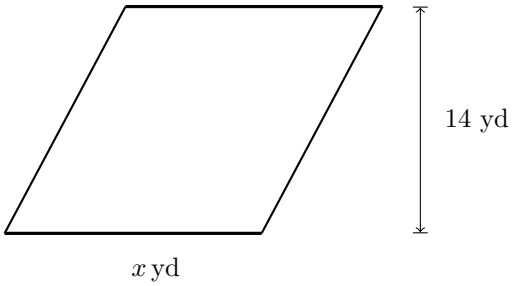
1. The figure below is a rhombus. Express the perimeter of the rhombus as a function of x and include appropriate units in your answer.



A. $f(x) = 14x$ yd

B. $f(x) = x + 14$ yd^2

C. $f(x) = 2x + 28$ yd

D. $f(x) = 14x$ yd^2

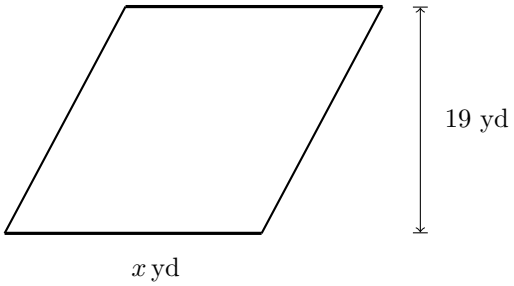
E. $f(x) = x + 14$ yd

F. $f(x) =$56 yd

G. $f(x) = 2x + 28$ yd^2

H. $f(x) = 4x$ yd

2. The figure below is a rhombus. Express the area of the rhombus as a function of x and include appropriate units in your answer.



A. $f(x) = 2x + 38$ yd

B. $f(x) = 4x$ yd

C. $f(x) = 2x + 38$ yd^2

D. $f(x) = 19x$ yd^2

E. $f(x) = 4x$ yd^2

F. $f(x) = x + 19$ yd

G. $f(x) = x + 19$ yd^2

H. $f(x) = 19x$ yd

3. A restaurant automatically adds an 10% gratuity to the food and beverage total on all bills. Write a function f for the gratuity added to a food and beverage total of x dollars and use your function to evaluate and interpret $f(25)$.

A. $f(25) = 250$. This means that \$25 will be added to a bill totalling \$250.

B. $f(25) = 15$. This means that \$25 will be added to a bill totalling \$15.

C. $f(25) = 250$. This means that \$250 will be added to a bill totalling \$25.

D. $f(25) = 2.5$. This means that \$10 will be added to a bill totalling \$2.5.

E. $f(25) = 2.5$. This means that \$2.5 will be added to a bill totalling \$25.

F. $f(25) = 15$. This means that \$15 will be added to a bill totalling \$25.

4. Use the function $f(x) = 3x + 7$ to evaluate the expression $f(1)$

A. 7

B. 12

C. 9

D. 10

E. 13

F. 11

5. Use the linear function $f(x) = \frac{x-3}{2}$ to complete this table

x	$f(x)$
-2	
-1	
0	
1	
2	

A.

x	$f(x)$
-2	-2.5
-1	-2
0	-1.5
1	0
2	-0.5

B.

x	$f(x)$
-2	-2.5
-1	-2
0	-3.5
1	-1
2	-0.5

C.

x	$f(x)$
-2	-2.5
-1	-2
0	-1.5
1	-1
2	-0.5

D.

x	$f(x)$
-2	0.5
-1	-2
0	-1.5
1	-1
2	-0.5

E.

x	$f(x)$
-2	-2.5
-1	-2
0	-1.5
1	-1
2	1.5

F.

x	$f(x)$
-2	-2.5
-1	-3
0	-1.5
1	-1
2	-0.5

6. The figure below is a rectangle. Express the perimeter of the rectangle as a function f of x and include appropriate units in your answer.

A. $f(x) = 4x$ ft

B. $f(x) = 2x + 10$ ft^2

C. $f(x) = 2x + 10$ ft

D. $f(x) = x + 5$ ft^2

E. $f(x) = 5x$ ft^2

F. $f(x) = 5x$ ft

G. $f(x) = 4x$ ft^2

H. $f(x) = x + 5$ ft

7. A coupon for a restaurant entitled the user to a 20% discount on any entree. Write a function for the amount of discount on an entree priced at x dollars.

A. $f(x) = -0.2x$

B. $f(x) = x - 0.2$

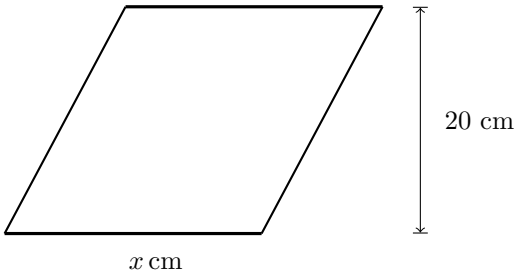
C. $f(x) = x - 20$

D. $f(x) = 0.2x$

E. $f(x) = -20x$

F. $f(x) = 20x$

8. The figure below is a rhombus. Express the perimeter of the rhombus as a function of x and include appropriate units in your answer.



A. $f(x) = 20x$ cm^2

B. $f(x) = 2x + 40$ cm^2

C. $f(x) = x + 20$ cm

D. $f(x) = 4x$ cm

E. $f(x) = x + 20$ cm^2

F. $f(x) = 20x$ cm

G. $f(x) = 80$ cm

H. $f(x) = 2x + 40$ cm