Question

1. $9x-4.5=5x+7$;

Solution

$9x-4.5=5x+7$
$9x-5x=7+4.5$
$4x=11.5$
$x=11.5/4$
$x=2.875$
Answer: $x=2.875$

Question

2. $10-x=3+7(x-4)$

Solution

$10-x=3+7(x-4)$
$10-x=3+7x-28$
$-x-7x=3-28-10$
$-8x=-35$
$x=(-35)/(-8)$
$x=35/8$
$x=4.375$
Answer: $x=4.375$

Make X the subject of each of the following formula

Question

1. $bx+c=y+1$

Solution

$bx+c=y+1$
$bx=y+1-c$
$x=(y+1-c)/b$
Answer: $x=(y+1-c)/b$

Question

2. $a(x-2)+d=bc$

Solution

$a(x-2)+d=bc$
$ax-2a+d=bc$
$ax=bc+2a-d$

x=(bc+2a-d)/a
Answer: x=(bc+2a-d)/a

Question

3. ax/b=5

Solution

ax/b=5
ax=5b
x=5b/a
Answer: x=5b/a

Question

4. b/2=2x+1/3

Solution

b/2=2x+1/3
-2x=1/3-b/2
2x= -1/3+b/2
x=1/2(-1/3+b/2)
x= -1/6+b/4
Answer: x= -1/6+b/4

Question

A rectangle has sides of 2x, and (x+2) metres. Its perimeter is 70m. How long is each side?

Solution

Perimeter is 2x+2x+(x+2)+(x+2)=70
6x+4=70
6x=70-4
6x=66
x=11
The lengths of sides are
x+2=11+2=13
and
2x=2*11=22
Answer: 13 and 22.