## Match the sentence in the first column with the corresponding equation in the second column.

1. Three more than twice a number is nine.
2. Two less than three times a number is nine.
3. Three times the number which is two less than x is nine.
4. Two times the number which is three less than x is nine.
5. Two times the quantity three more than x is nine.
6. Three less than the product of two and $x$ is nine.
7. Two decreased by three times a number is nine.
8. Three times the quantity two decreased by x is nine.
a. $\quad 2-3 x=9$
b. $\quad 3(x-2)=9$
c. $\quad 2 \mathrm{x}+3=9$
d. $2(x+3)=9$
e. $\quad 3(2-x)=9$
f. $\quad 2(\mathrm{x}-3)=9$
g. $\quad 2 x-3=9$
h. $\quad 3 x-2=9$

## Translate each sentence into an equation.

9. One half of a number is four.
10. Six less than a number is nine.
11. Five less than twice a number is 15 .
12. Eleven more than twice x is five less than x .
13. Three more than a number is eight.
14. The number $x$ is seven more than one fourth of itself
15. Two times the quantity x minus 1 is 12 .
16. Nine times $x$ is twice the sum of $x$ and five.

## Solve each problem over the domain $\{2,3,4,5\}$.

17. Eleven more than a number is 15 . What is the number?
18. Four times a number is 16 . What is the number?
19. A number divided by one is 5 . What is the number?

20 One less than twice a number is 9 . What is the number?
21. One more than twice a number is 7 . What is the number?

Use the figure and the information below to write an equation involving x .


Perimeter $=21$


Perimeter $=28$

## Write an equation that represents the given information.

24. The distance traveled in 3 hours of driving was 210 km . (Hourly rate)
25. A train traveled at $66 \mathrm{~km} / \mathrm{h}$ for 4 hours. (Distance traveled)
26. A driver averaged $60 \mathrm{~km} / \mathrm{h}$ while driving 300 km . (Time)
