## 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. 2 3x = 9
- u. 2 3A
- b. 3(x-2) = 9
- c. 2x + 3 = 9
- d. 2(x + 3) = 9
- e. 3(2-x)=9
- f. 2(x-3) = 9
- g. 2x 3 = 9
- h. 3x 2 = 9

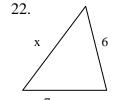
## Translate each sentence into an equation.

- 9. One half of a number is four.
- 11. Six less than a number is nine.
- 13. Five less than twice a number is 15.
- 15. Eleven more than twice x is five less than x.
- 10. Three more than a number is eight.
- 12. The number x is seven more than one fourth of itself
- 14. 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 $\{2, 3, 4, 5\}$ .

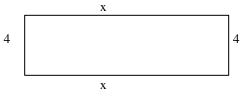
- 17. Eleven more than a number is 15. What is the number?
- 18. Four times a number is 16. What is the number?
- 19. A number divided by one is 5. What is the number?
- 20 One less than twice a number is 9. What is the number?
- 21. One more than twice a number is 7. What is the number?

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



Perimeter = 21

23.



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 km/h for 4 hours. (Distance traveled)
- 26. A driver averaged 60 km/h while driving 300 km. (Time)