



Shreeji Education

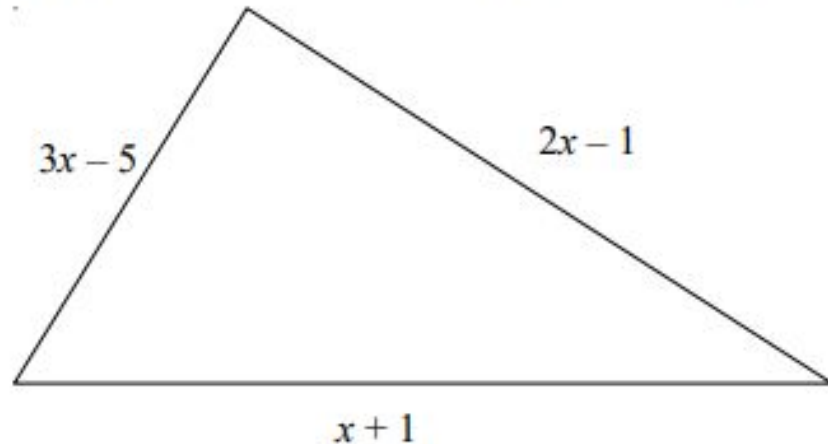
We respect your ability

13+..Algebra 1

Solve the following

Monday

The lengths, in cm, of the sides of a triangle are $3x - 5$, $2x - 1$ and $x + 1$



(a) Write down an expression, in terms of x , for the perimeter of the triangle.

(2)

The perimeter of the triangle is 31 cm.

(b) Work out the value of x .

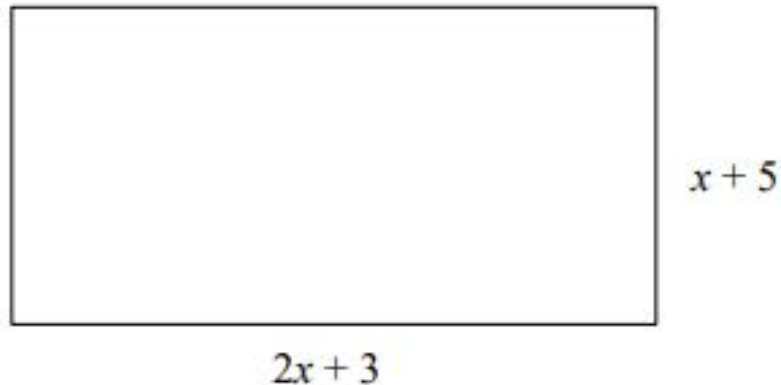
(2)

(Total for question 1 is 4 marks)

Solve the following

Monday

A rectangle has a length of $(2x + 3)$ cm and a width of $(x + 5)$ cm.

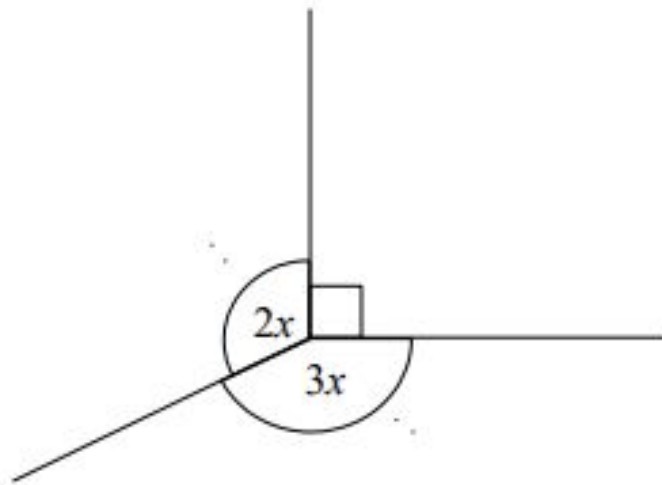


- (a) Find an expression for the perimeter of the rectangle. (2)
- (b) Given the rectangle has a perimeter of 43 cm find the value of x . (2)

(Total for question 2 is 4 marks)

Solve the following

Monday



Find the value of x .

(Total for question 3 is 3 marks)

Solve the following

Tuesday

Solve the following linear equations :

1. $3(x - 5) = 5x + 13$

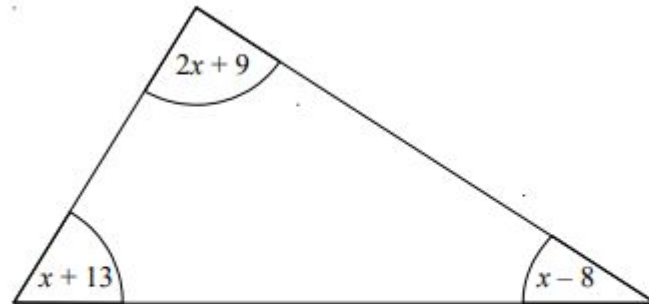
2. $3(x - 5x) - 2 = 12x$

3. $\frac{4x - 13}{10 - 2x} = 2$

Solve the following

Tuesday

The sizes of the angles, in degrees, of a triangle are $2x + 9$, $x + 13$ and $x - 8$



Work out the value of x .

(Total for question 5 is 3 marks)

Solve the following

Wednesday

Solve the following

1. $5(x+12) = 4x - 12$
2. $2(3x-5) = 34$
3. $(x-4) = 4x - 3$
4. $4(12-4x) - 3(2-5x) = 4$
5. $4(-12-x) + 7x = 5x$

Solve the following

Thursday

Make y the subject of the formula

$$4y + 4 = \frac{2}{5}$$

$$12 - 12y = \frac{12y}{3}$$

$$\frac{3y - 3}{2y + 12} = 12$$

$$F = xyr + 24$$

$$\frac{x}{2} - 4x + 6y = 12$$

$$6yr = 12y + 3$$

$$v^2 + \frac{2}{3}y = 10$$

Solve the following

Friday

1. The sum of three consecutive numbers is 102. Find the numbers
2. If numerator is divided by two times the numerator plus three, the answer is 5. Find the numerator.
3. Mary has 6 marbles more than Shrikala. If both together have 25 marbles, how many each have?
4. If two times a number subtracted from 28, the result is 32. Find the number
5. Malik has \$ x in bank. If he gave away \$ 12 to his friend, his account has half the money now. How much was money was there in his account initially?

Solve the following

Saturday

Solve making following substitution

$$x + 12y = x^2, \quad x = 9, \quad y = -3$$

$$4x - \frac{2}{3}y - 12, \quad x = -2, \quad y = 9$$

$$3x - 4y = 12, \quad x = -1, \quad y = 3$$

$$3y \div 7x, \quad x = -2, \quad y = 0$$

$$\frac{6x}{4y - 3} + 12 = -16, \quad x = 3, \quad y = 2$$

$$\frac{x}{y} - 4x + 6y, \quad x = -8, \quad y = 4$$