

Year 7 Weekly Tutorial - 24

mathsalpha.com

1. Work out the following.

a)
$$4 \times 3(3 \times 5 - 12 \div 4)$$

b)
$$5^2 - 2(4^2 \times 3 \div 12)$$

2. Simplify.

a)
$$3 - 4(x - 5) + 7x$$

b)
$$5(x+3)-2(2x-3)$$

3. Simplify.

a)
$$\frac{5^5 \times 4^3 \times 5^0}{4^2 \times 5^3}$$

b)
$$\frac{(2\times3^2)^2\times2^2\times3}{2^3\times3^3}$$

4. Solve.

a)
$$2(x-1) + 5 = x + 3$$

c)
$$\frac{3}{2}(x-1) = 2x + 5$$

b)
$$3 - \frac{(x+1)}{2} = 4$$

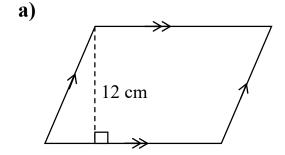
d)
$$\frac{2x+7}{x-5} = \frac{3}{2}$$

5. Solve and show the solutions on the number line.

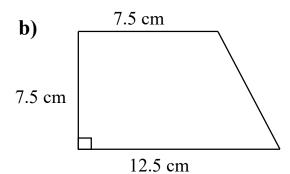
a)
$$4x + 3 \ge 3x + 5$$

b)
$$3(x-1) < 2x - 5$$

- **6.** Draw the straight line y = 3 2x in the range, $0 \le x \le 2$.
- 7. Find the area of the following shapes.

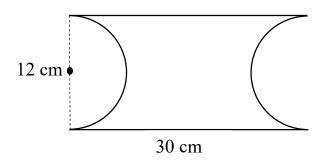


15 cm

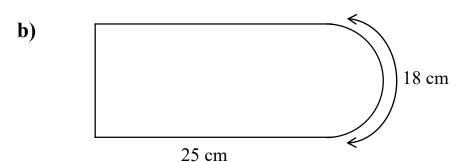


© 2024 Dharana.k Dharana Siriwarnage, PGD (maths), BSc **8.** Find the area of the following shapes correct to 1dp.

a)

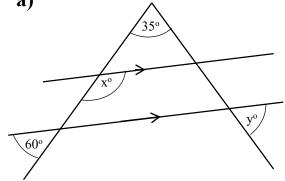


Semicircle of radius 6 *cm* cut from each side of the rectangle.

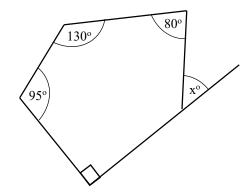


9. Find the unknown angles.

a)



b)



10.

- a) Draw a stem and leaf diagram for the following data.
- **b)** Find the median of the data.
- c) Find the average of the data.

| 10.3 | 10.5 | 11.2 | 11.3 |
|------|------|------|------|
| 12.5 | 13.6 | 12.4 | 15.4 |
| 10.7 | 12.2 | 12.5 | 15.2 |
| 13.2 | 10.4 | 11.3 | 12.8 |