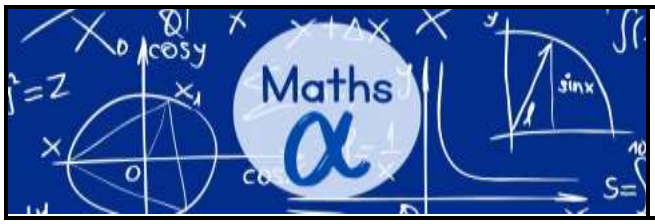

Year 7
Weekly Tutorial - 25

mathsalpha.com

1. Work out the following.

a) 7.5×2.8

b) $1.2 \div 0.04$

2. Estimate.

a) $\frac{9.8\times423}{1.875\times5.13}$

b) $\frac{182.5\times8.12}{162.8\times1.837}$

3. Write the following fractions as decimals and percentages. (Give your answers correct to 1dp)

a) $\frac{3}{15}$ **b)** $\frac{26}{25}$ **c)** $\frac{7}{15}$ **d)** $\frac{0.8}{5}$

4. Simplify.

a) $17 - 5 \times (-3) - 7$

b) $15 - 15 \div 5 \times 5$

c) $3^2 \times 2 - 2^3 \times 3$

d) $5 - 5(3 \times 2 - 7)$

5. Simplify.

a) $\frac{2^5\times3^3\times3\times2^0}{2^3\times3^2}$

b) $\frac{11^3\times13^2\times13^0}{11^2\times13}$

6. Solve.

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

b) $\frac{x}{2} + 3 = 7$

c) $3(x + 2) = x + 5$

d) $\frac{5x-2}{3} = 1$

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

f) $12 - \frac{3}{2}(x + 2) = 5 - x$

7. Solve the following inequalities and show the solutions on the number lines.

a) $2(x + 3) \leq x + 5$

b) $\frac{x+3}{2} > x + 5$

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8. Draw the straight line graphs for the following equations.

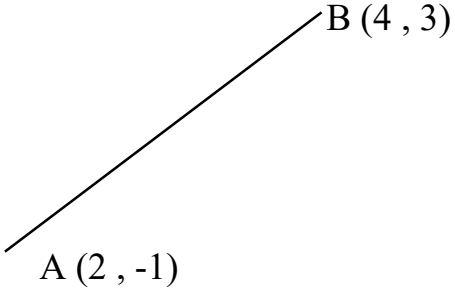
a) $y = -x + 2 \quad , -1 \leq x \leq 1$

b) $y = 3x - 2 \quad , -1 \leq x \leq 2.$

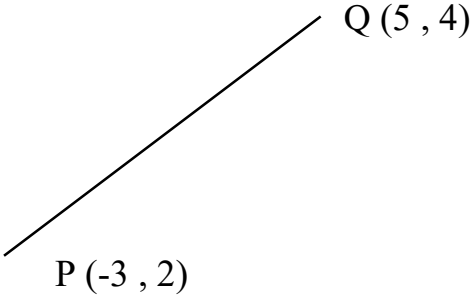
9. Find the HCF and LCM of 80 and 130.

10. Find the coordinates at midpoint of the following line segments.

a)

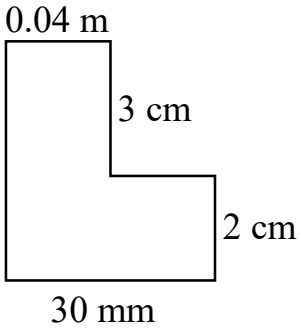


b)

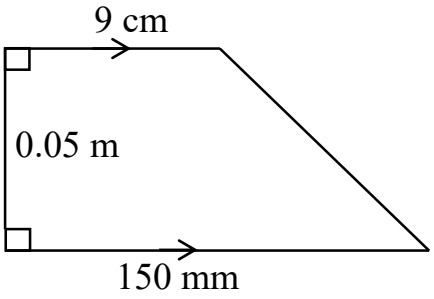


11. Find the area of the following shapes. Give the answers in cm^2.

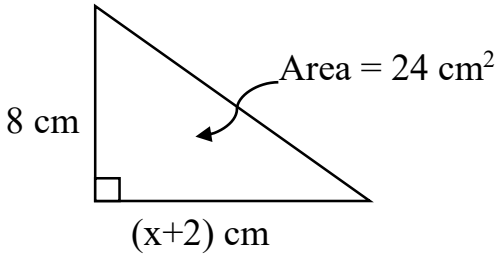
a)



b)

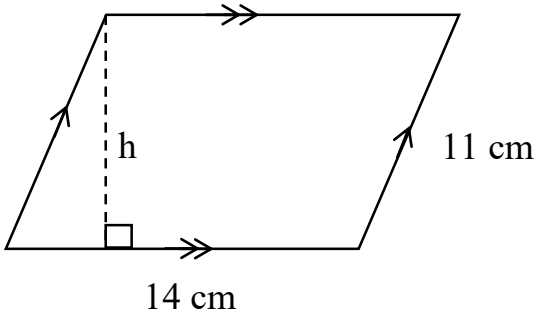


12.



Find x.

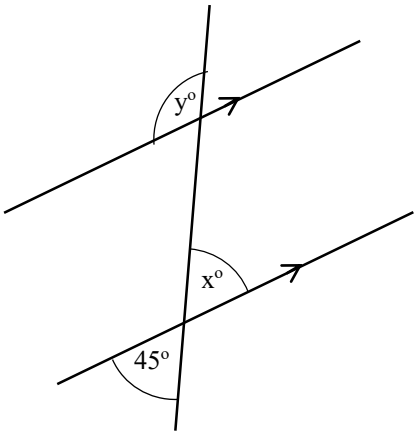
13.



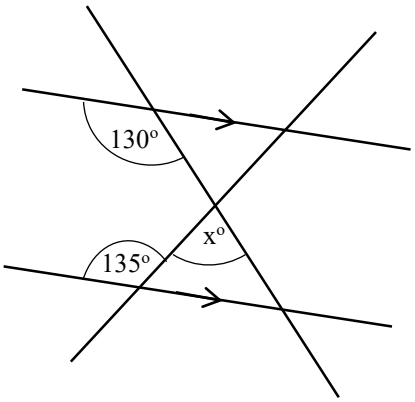
If the area of the shape is twice the perimeter, find h.

14. Find the unknown angles.

a)



b)



15.

11		12
13	11	14
9	x	11
	15	

The mean of the set of numbers is 12. Find the value of x. And find the mode, median and the range of the set of numbers.