1) Look at the list of numbers below.

5 6 7 8 9 10 11

Using the list, numbers can only be used **once**.

(a) a prime number .....

(b) a square number .....

(c) a factor of **98** .....

(d) $\sqrt{121}$ .....

(e) a cube number .....

2) Without using a calculator, work out the following:

(a) $358.7 + 3.9 + 558$ - - - - - - - -

(b) $7.82 - 3.9$ - - - - - - - -

(c) $\frac{2}{3} + \frac{3}{4}$ ___ - - - - - - - -

(d) $\frac{7}{8} - \frac{2}{5}$ ___ - - - - - - - -

(e) $82 \div 1000$ - - - - - - - -

(f) 0.023×100 - - - - - - - -

(g) 2.39×1.8 - - - - - - - -

(h) $7.62 \div 1.2$ - - - - - - - -

(i) $9 - -14$ - - - - - - - -

(j) $-8 + -13$ - - - - - - - -

(k) $-16 - 5 + -4$ - - - - - - - -

(l) -7×6 - - - - - - - -

(m) $-5 \times 9 \times -2$ - - - - - - - -

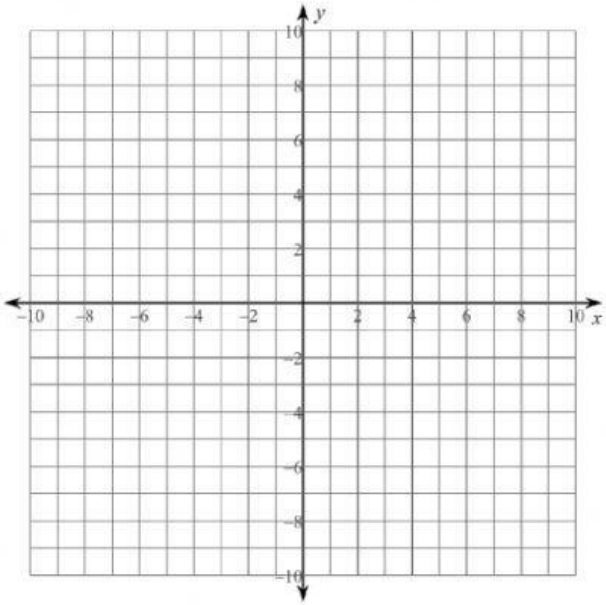
(n) $-72 \div 8$ - - - - - - - -

(o) $-64 \div -4$ - - - - - - - -

3) Write 5567.31 in words

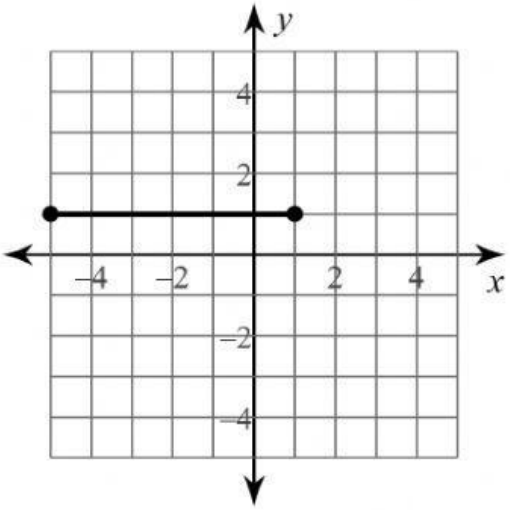
- - - - - - - -

13) Plot and label the following points on the grid. $I(-10, 5)$ $J(-9, 7)$ $K(-1, 3)$ $L(3, -7)$ $M(6, 3)$



14) What are the coordinates of the midpoint of the line plotted below?

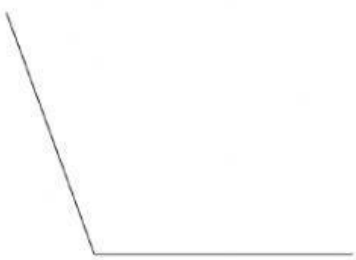
(. . , . .)



15) Estimate the size of the following angles to the nearest $\mathbf{10}°$

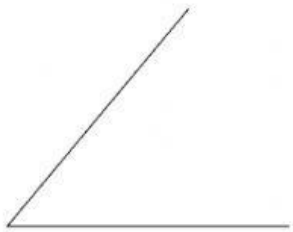
Do not use a protractor.

(a)



(a) _____°

(b)

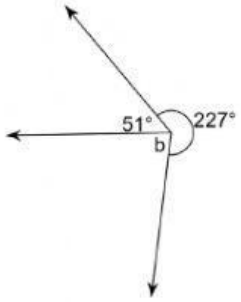


(b) _____°

LIVEWORKSHEETS

16) Without using a protractor, calculate the size of the angles marked ***b***

(a)

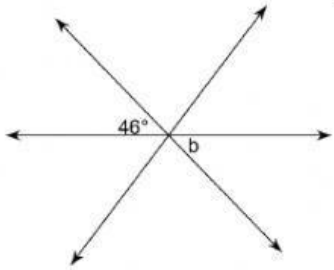


b =_____°

Reason: - - - - - - - - - - - - - - - - - -

- - - - - - - - - - - - - - - - - - - -

(b) These are three intersecting lines.

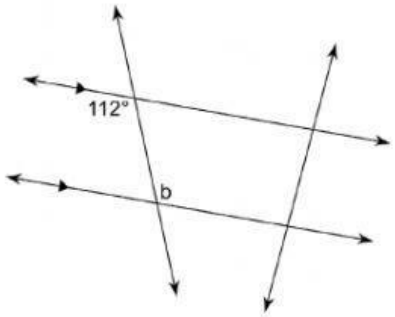


b =_____°

Reason: - - - - - - - - - - - - - - - - - -

- - - - - - - - - - - - - - - - - - - -

(c)



b =_____°

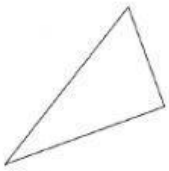
Reason: - - - - - - - - - - - - - - - - - -

- - - - - - - - - - - - - - - - - - - -

17) Classify the following triangles.

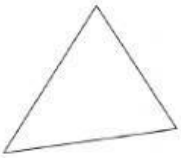
Choose all that apply.

(a)



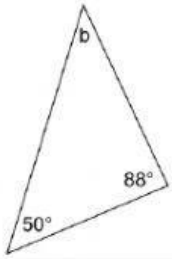
A) acute B) obtuse
C) right D) scalene

(b) .



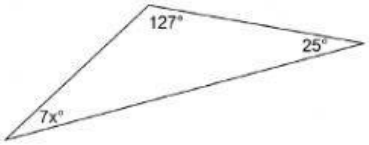
A) right B) obtuse
C) acute D) scalene

18) Find b



b =_____°

19) Construct and equation and solve for x

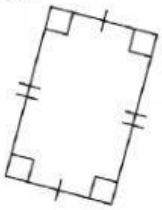


x =____

LIVEWORKSHEETS

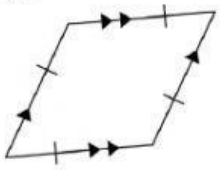
20) Complete the table with the most accurate name for these quadrilaterals. Use the list given.

(a)



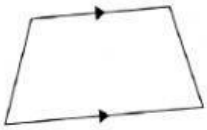
(a) _____

(b)



(b) _____

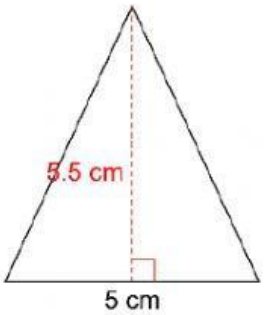
(c)



(c) _____

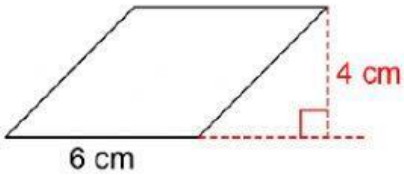
21) Find the area of the following polygons.

(a)



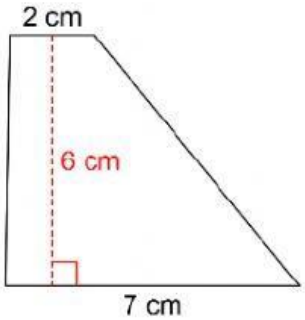
(a) _____ cm^2

(b)



(b) _____ cm^2

(c)



(c) _____ cm^2

LIVEWORKSHEETS

22) Simplify the following expressions.

(a) $-2 + 3b + b - 3 - 1 - 2b$ _____

(b) $-m + 3 - 1 - 2m + 3 + 2m$ _____

(c) $4(8x + 3)$ _____

(d) $-x(-5x + 6)$ _____

(e) $2 + 7(3x - 4)$ _____

(f) $-1 + 7(-7x + 10)$ _____

23) Solve the following equations

(a) $x - 17 = 15$ $\boldsymbol{x =}$ _____

(b) $x - 17 = -33$ $\boldsymbol{x =}$ _____

(c) $\frac{n}{8} = 10$ $\boldsymbol{n =}$ _____

(d) $2 + m = 13$ $\boldsymbol{m =}$ _____

(e) $11y = -77$ $\boldsymbol{y =}$ _____

(f) $\frac{x}{4} - 2 = 7$ $\boldsymbol{x =}$ _____

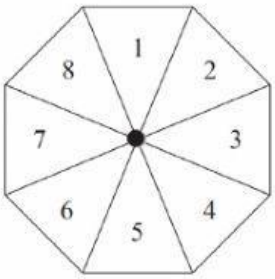
(g) $3x + 4 = 25$ $\boldsymbol{x =}$ _____

24) Find the value of

$$5r + 3x + 2e$$

when $r = 4$, $x = 6$ and $e = 6$ _____

25) A spinner is made in the shape of a regular octagon.
The sections are numbered 1 to 8.



Calculate the following probabilities then write your answer in simplest form.

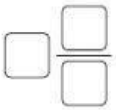
(a) What is the probability of landing on **7**? ____

(b) What is the probability of landing on a **multiple of 2**? ____

(c) What is the probability of landing on a number **greater than 2**? ____

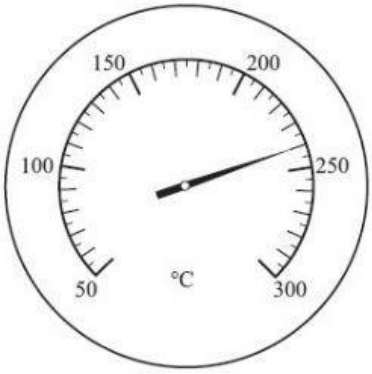
LIVEWORKSHEETS

26) Write the quotient of 36 ÷ 5 as a mixed number.



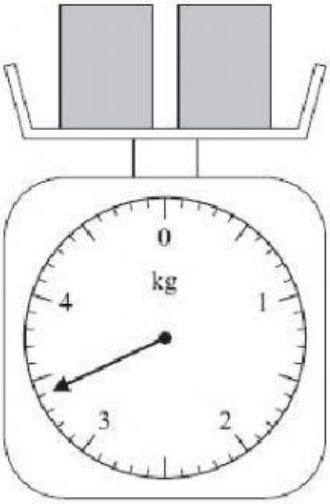
27) Reading scales.

(a) What is the temperature of the oven?



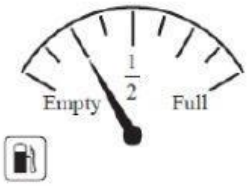
_____ °

(b) What is the weight of each box?



_____ kg

(c) A petrol tank holds 48 litres of petrol when it is full.
Use the scale to find how many litres are left in the tank.



_____ litres

LIVEWORKSHEETS