

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

.....
.....
.....
.....

4) Round the 84.25 to:

- (a) the nearest whole number
- (b) the nearest tenth
- (c) the nearest ten

5) Complete the following table.

Fraction	Decimal	Percent
$\frac{7}{25}$		%
.....	0.375	%
.....		85%

6) Write 16 : 12 in simplest form

_____ : _____

7) Tick (✓) the right box.

4 : 9 is proportional to 2.5 : 4.5

Yes	No
☐	☐

8) If six bags of potatoes cost \$9. How many bags of potatoes can you buy for \$3?

9) What is 30% of \$120?

10) 25% of what is 36?

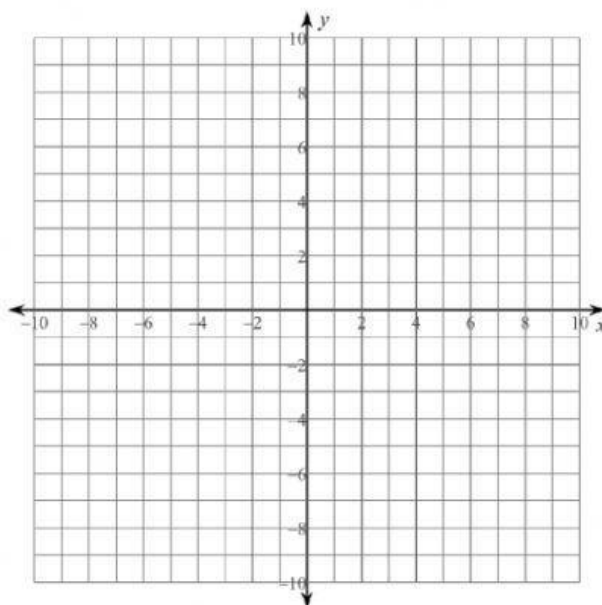
11) What fraction of 42 is 14?

12) Paula buys 5 litres of milk for \$8.50.
How much does 2 litres of milk cost? \$



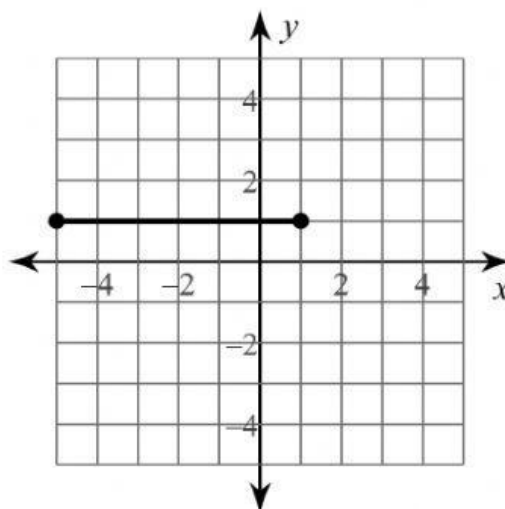
13) Plot and label the following points on the grid.

$I(-10, 5)$ $J(-9, 7)$ $K(-1, 3)$
 $L(3, -7)$ $M(6, 3)$



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

(,)



15) Estimate the size of the following angles to the nearest 10°

Do not use a protractor.

(a)



(a) _____ $^\circ$

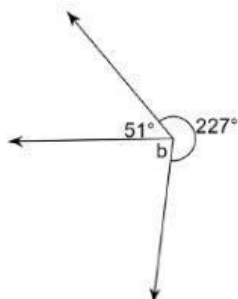
(b)



(b) _____ $^\circ$

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

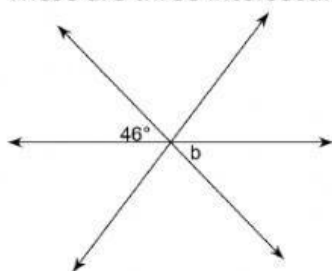
(a)



$$b = \underline{\hspace{2cm}}^\circ$$

Reason:

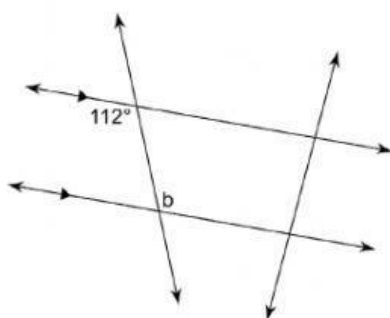
(b) These are three intersecting lines.



$$b = \underline{\hspace{2cm}}^\circ$$

Reason:

(c)



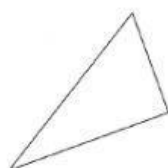
$$b = \underline{\hspace{2cm}}^\circ$$

Reason:

17) Classify the following triangles.

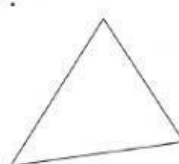
Choose all that apply.

(a)



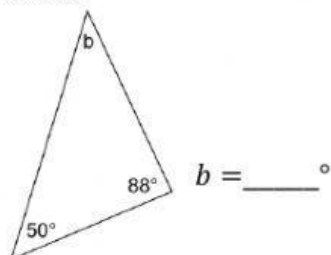
- A) acute B) obtuse
C) right D) scalene

(b)



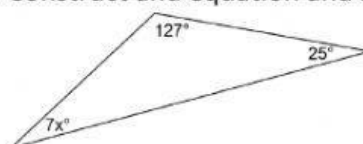
- A) right B) obtuse
C) acute D) scalene

18) Find **b**



$$b = \underline{\hspace{2cm}}^\circ$$

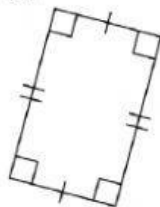
19) Construct an equation and solve for **x**



$$x = \underline{\hspace{2cm}}$$

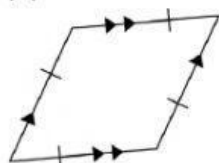
20) Complete the table with the most accurate name for these quadrilaterals. Use the list given.

(a)



(a) _____

(b)



(b) _____

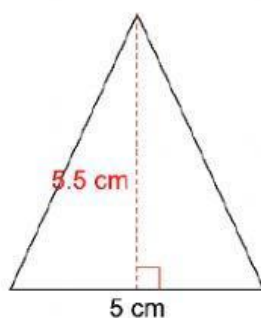
(c)



(c) _____

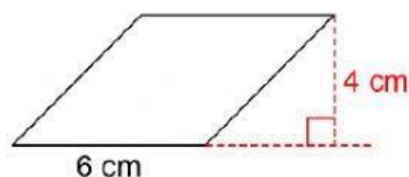
21) Find the area of the following polygons.

(a)



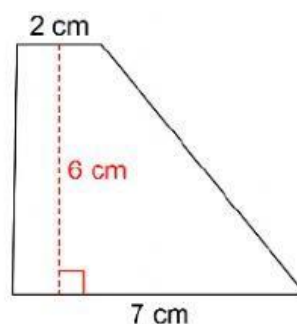
(a) _____ cm^2

(b)



(b) _____ cm^2

(c)



(c) _____ cm^2

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) $x - 17 = 15$ $x =$ _____

(b) $x - 17 = -33$ $x =$ _____

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

(d) $2 + m = 13$ $m =$ _____

(e) $11y = -77$ $y =$ _____

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

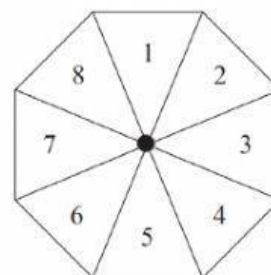
(g) $3x + 4 = 25$ $x =$ _____

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.



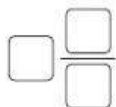
Calculate the following probabilities then write your answer in simplest form.

(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**? _____

26) Write the quotient of $36 \div 5$ as a mixed number.



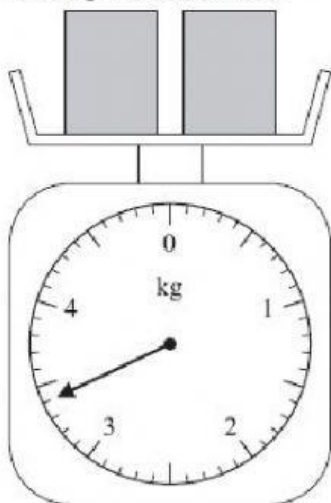
27) Reading scales.

(a) What is the temperature of the oven?



_____ °

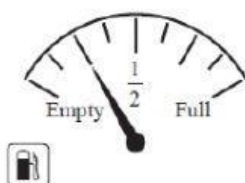
(b) What is the weight of each box?



_____ 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