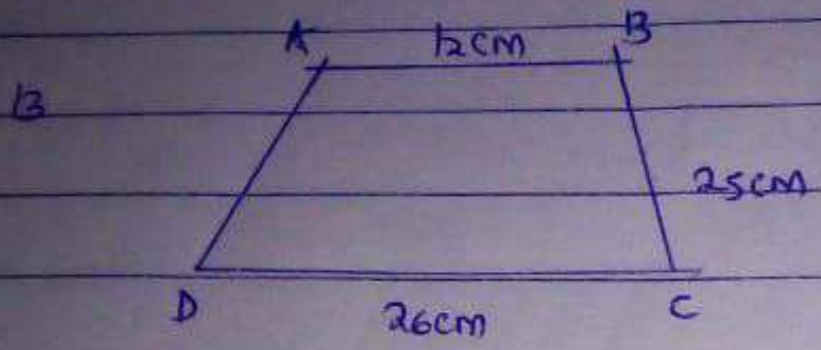


$26 - 12 = 14$

$\frac{14}{2} = 7cm$

$25^2 - 7^2 = 576$

$24cm$

14

$\frac{1}{2}(61 + 91) \times 51 \times 168$

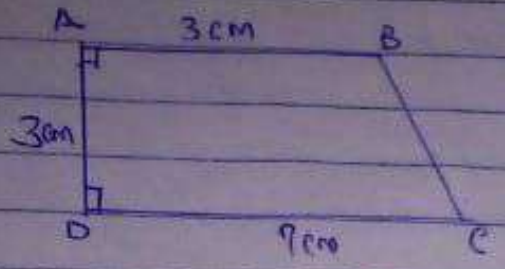
$651168 cm^3$

$1cm^3 = 1mL$

$\frac{651168 mL}{1000}$

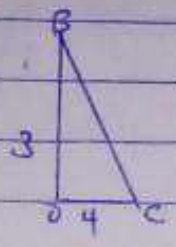
$651.168 L$

12



(a) Trapezium

(b) $\angle ABC$



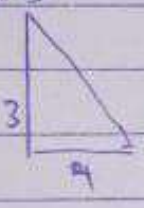
$\tan\theta = \frac{3}{4}$

36.87

$90 - 36.87$

53.13°

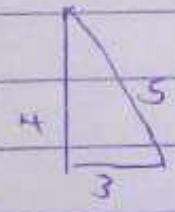
c $\angle DCB$



$\tan\theta = \frac{3}{4}$

36.87°

d BC



$4^2 + 3^2 = 25$

5cm

(e) Perimeter

$5 + 3 + 3 + 7$

18cm

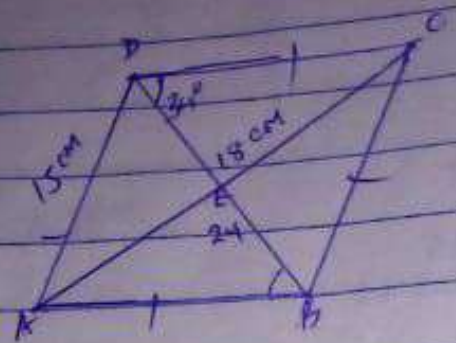
(d)

$\frac{1}{2}(a+b)h$

$\frac{1}{2}(10)3$

$= 15cm^2$

11



(a) Rhombus

(b) $\angle ABE$

$= 34°$

(c) $\angle BAE$

$90 + 34 = 124$

$180 - 124$

$= 56°$

(d) $\angle CED$

$= 90°$

(e) $\angle ADE = 34°$

(f) AE

$15 \sin 34 = AE$

8.39cm

(g) ED

$15 \cos 34 = ED$

12.44cm

(h) $CD = 15\text{cm}$

(f) Perimeter

~~AB²~~ =

45° $\cos 45 = \frac{15}{hyp}$

$hyp = \frac{15}{\cos 45}$

21.21 cm

~~2+2~~ (21.21 x 2) + (2 x 15)

42.42 + 30

= 70.42 cm

(g) Area -

$\frac{1}{2} \times 21.21 \times 10.61$

112.5 cm^2

d ∠BAC

$90 - 57.53^\circ$

32.47°

∠DAC = ∠BAC

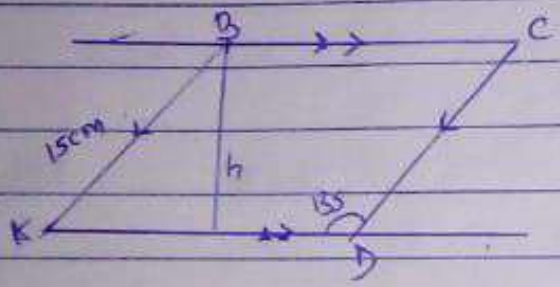
$= 32.47^\circ$

(e) $\left(\frac{1}{2} \times 7 \times 11 \times \sin 82\right) + \left(\frac{1}{2} \times 4 \times 7 \times \sin 82\right)$

$77 + 28$

$105 cm^2$

(10)



(a) ~~Trapezium~~ Parallelogram

(b) ∠BAD

$= 180 - 135$

$= 45^\circ$

(c) ∠ABC

ABC = ADC

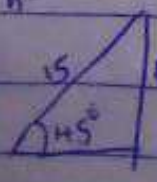
$= 135^\circ$

(d) ∠BCD

BCD = BAD

$= 45^\circ$

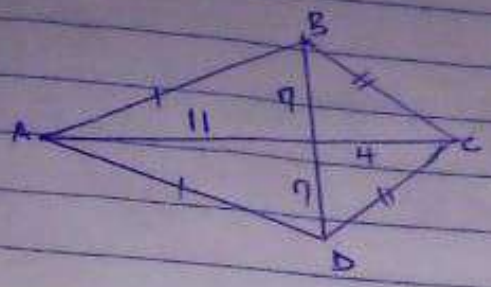
(e) h.



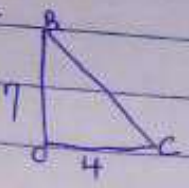
$15 \times \sin 45 = h$

$10.61 cm$

9.



(a) $\angle CBD =$



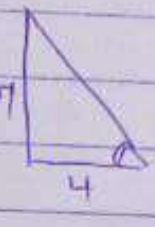
$\tan\theta = \frac{4}{7} =$

29.74°

$\angle CDB = \angle CBD$

$= 29.74^\circ$

(b) $\angle BCA$



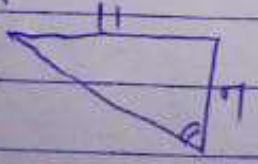
$= \tan\theta = \frac{7}{4}$

60.26°

$\angle DCA = BCA$

60.26°

(c) $\angle BDA$



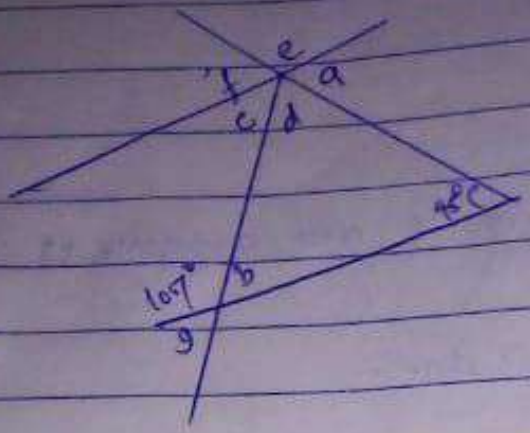
$\tan\theta = \frac{11}{7}$

57.53°

$\angle DBA = \angle BDA$

$= 57.53^\circ$

8



(a) $= 45^\circ$

(b) $= 180 - 107$

$= 73^\circ$

(c) $=$

$c^\circ = b^\circ = 73^\circ$

(d) $= 73 + 45$

$= 118$

$180 - 118$

$= 62^\circ$

(e)

$e^\circ = c^\circ + d^\circ$

$= 62 + 73$

$= 135^\circ$

(f).

$f = a = 45^\circ$

$= 45^\circ$

(g) $=$

$g = b = 73$

$= 73^\circ$

(6) 9. The resulting pairs of triangles would be scalene rather than isosceles.

(4)

Name	Sides	Angles	Diagnals
Trapezium	one pair of parallel lines no equal sides	2 suplemetally angles No complemetally angle no equal angle.	not equal diagnals not perpendicular.
Rhombus Parallelogram	2 pairs of equal sides 2 pairs of parallel lines	2 suplemetaly angles No complementaly angles	not equal not perpendicular.
Rectangle	Two pairs of equal sides 2 pairs of parrallel sides	~~two~~ Supplemetaly angles no completaly angles	Equal in length not perpendicular.
Square	Are equal 2 pairs of parallel sides	Suplemetally angles no complementally angles	Equal in length Perpendicular
Rhombus	equal Two parallel sides	Supplementaly angles	Perpendicular.
Kite	not equal not parallel	two equal angles	perpendicular
Trapezium	one parallel One equal pair.	Supplementaly	not perpendicular not equal
Trapezium	One parallel side. no equal pair	Supplementaly	Not perpendicular not equal

5.2

1. Rectangle.

2. opposite angles of trapezoids are congruent.

3. Diagnals are perpendicular.

4

(8) 4

1st opens all

2nd person closes all even lockers #11

3rd closes 3, 9, 15, 21 and opens 6, 12, 18, 24

4th opens 4, 8, 16, 20 closes 12, 24

5th Closes 5, 25 opens 15 10, 20

6th Closes 18, 24 Closes opens 12, 6

7th closes 7, opens 21, 14

8th Closes 16 opens 24 · 8

9th Closes 0 opens 18, 9

10 Closes 10, 20 opens 0

11 opens 22 Closes 11

12 opens 0 closes 12, 24

1, 4, 6, 8, 9, 16, 24 25

8 opens

5 Angle formed by intersection of diagnals