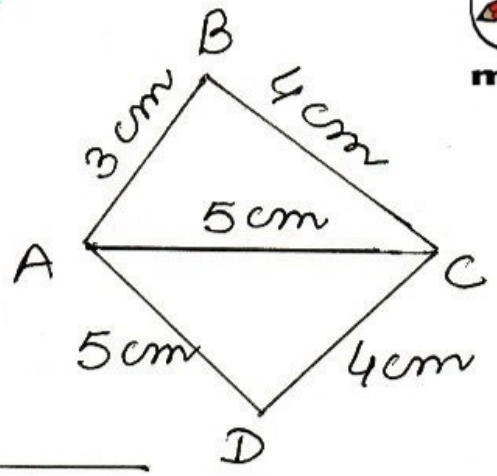
(2)



$\triangle ABC$

$s = \frac{3+4+5}{2}$

$= \frac{12}{2}$

$= 6\ cm^2$

$area = \sqrt{6(6-3)(6-4)(6-5)}$

$= \sqrt{6 \times 3 \times 2 \times 1}$

$= \sqrt{2 \times 3 \times 3 \times 2}$

$= 2 \times 3$

$= 6\ cm^2$

$\triangle ADC$

$s = \frac{4+5+5}{2}$

$= 7\ cm$

$area = \sqrt{7(7-4)(7-5)(7-5)}$

$= \sqrt{7 \times 3 \times 2 \times 2}$

$= 2\sqrt{21}\ cm^2$

area of $\square ABCD = ar(\triangle ABC) + ar(\triangle ADC)$

$= (6 + 2\sqrt{21})\ cm^2$