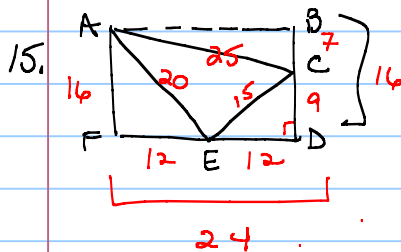


$$3^2 + a^2 = 9^2 \rightarrow a^2 = 81 - 9 = 72$$

$$a = \sqrt{9 \cdot 4 \cdot 2}$$

$$a = 3 \cdot 2 \sqrt{2}$$

$$a = 6\sqrt{2}$$

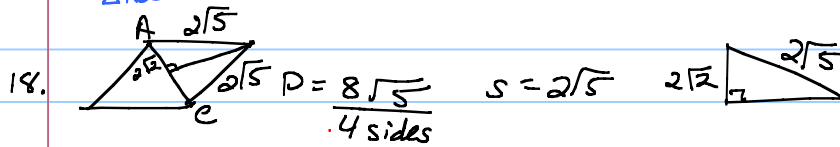


$$3 (3, 4, 5) = \triangle CDE$$

$$4 (3, 4, 5) = \triangle AFE$$

$$(7, 24, 25) \triangle ABC$$

$$P_{\triangle ACE} = 60$$



ch 5: diags whom bis each other \perp

$$(2\sqrt{2})^2 + d^2 = (2\sqrt{5})^2$$

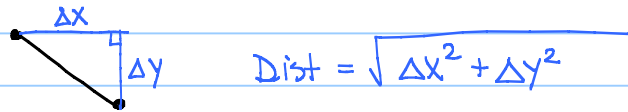
$$8 + d^2 = 20$$

$$d^2 = 12$$

$$d = \sqrt{4 \cdot 3} = 2\sqrt{3}$$

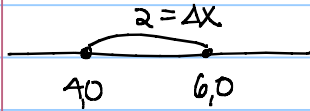
other diag: $4\sqrt{3}$

9.5: DISTANCE FORMULA 1-23 odd

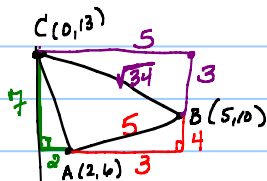


1a (4,0) & (6,0)

$$\sqrt{2^2 + 0^2} = \sqrt{4} = 2$$



2.



$$\sqrt{3^2 + 5^2} = \sqrt{9 + 25} = \sqrt{34}$$

$$\sqrt{3^2 + 4^2} = \sqrt{25} = 5$$

$$\sqrt{2^2 + 7^2} = \sqrt{4 + 49} = \sqrt{53}$$

$$\text{Exact } P_{\triangle ABC} = 5 + \sqrt{34} + \sqrt{53}$$

$$\text{Est } P_{\triangle ABC} = 18.1$$