

## Law of Cosines

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$b^2 = a^2 + c^2 - 2ac \cos B$$

$$c^2 = a^2 + b^2 - 2ab \cos C$$

1. In  $\triangle ABC$ ,  $a = 4$ ,  $b = 5$ ,  $C = 58^\circ$   
Find  $c$ .

2. In  $\triangle DEF$ ,  $d = 2$ ,  $e = 3$ ,  $f = 4$   
Find  $D$ .