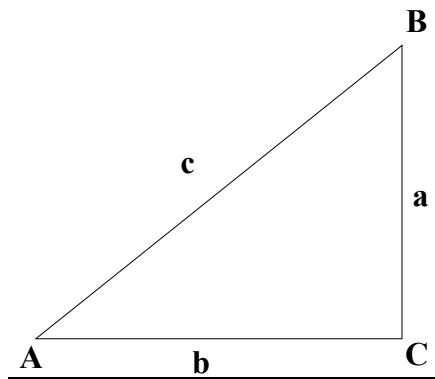


### جداؤل بعض العلاقات الرياضية

### Right Angles .١



$$\sin A = \frac{a}{c} = \cos B$$

$$\cos A = \frac{b}{c} = \sin B$$

$$\tan A = \frac{a}{b} = \cot B$$

$$\sec A = \frac{c}{b} = \operatorname{cosec} B$$

$$\operatorname{cosec} A = \frac{c}{a} = \sec B$$

$$\cot A = \frac{b}{a} = \tan B$$

### Derived Relationships .٢

$$a = c \sin A = c \cos B = b \tan A = b \cot B = \sqrt{c^2 - b^2}$$

$$b = c \cos A = c \sin B = a \cot A = a \tan B = \sqrt{c^2 - a^2}$$

$$c = \frac{a}{\sin A} = \frac{a}{\cos B} = \frac{b}{\sin B} = \frac{b}{\cos A} = \sqrt{a^2 + b^2}$$