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| **Fill in the Blanks** | **Finding Angles Using Cosine Rule** |

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| **Labelled diagram** | **Substitute** **into formula** | **Rearrange formula** | **Angle (1dp)** |
|  | $$14^{2}=9^{2}+13^{2}$$$$-2×9×13×\cos(x)$$ | $$\cos(x)=\frac{9^{2}+13^{2}-14^{2}}{2×9×13}$$ | $$x=76.7°$$ |
|  | $$15^{2}=10^{2}+7^{2}$$$$-2×10×7×\cos(x)$$ | $$\cos(x)=\frac{10^{2}+7^{2}-15^{2}}{2×10×7}$$ |  |
|  | $$4^{2}=7^{2}+8^{2}$$$$-2×7×8×\cos(x)$$ |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  | $$\cos(x)=\frac{6^{2}+5^{2}-3^{2}}{2×6×5}$$ |  |