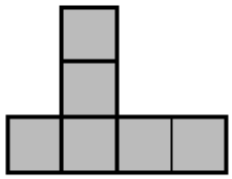
20. The diagram shows six squares with sides of length 2 placed edge-to-edge. What is the radius of the smallest circle containing all six squares?



A $2\sqrt{5}$ B $2\sqrt{6}$ C 5 D $\sqrt{26}$ E $2\sqrt{7}$

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20. A It is always possible to draw a circle through three points which are not on a straight line. The smallest circle containing all six squares must pass through (at least) three of the eight vertices of the diagram. Of all such circles, the smallest passes through S, V and Z and has its centre at X. The radius is then $\sqrt{4^2 + 2^2} = \sqrt{16 + 4} = \sqrt{20} = 2\sqrt{5}$.