最も短い結び方・３

マス目の上にある点を，線にそって結びます。結ぶときは，できるだけ短くします。たとえば，図１の点では，図２の２通りの結び方があります。図３のようによけいに長く結ぶことできません。

図１

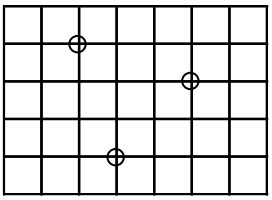


図２

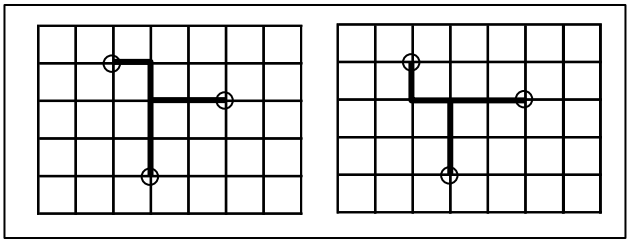


図３

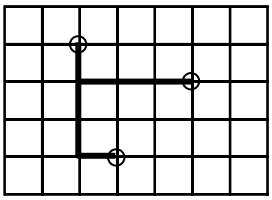
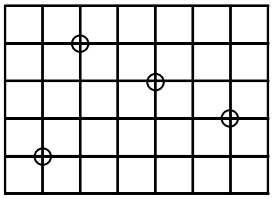
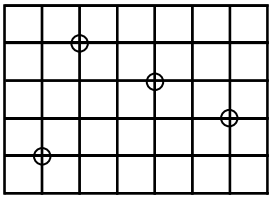
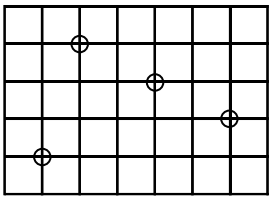
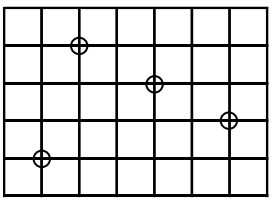
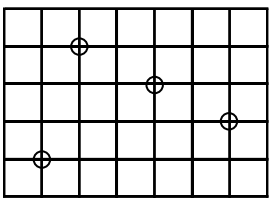
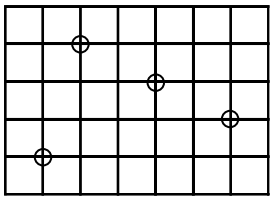
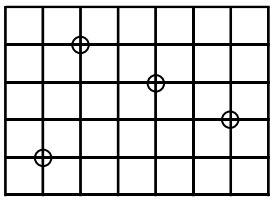
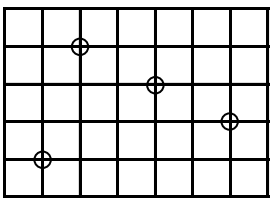
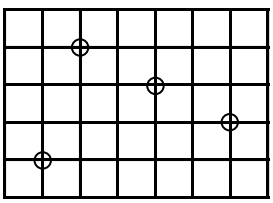


図４では，何通りの結び方がありますか。

図４



【練習用】

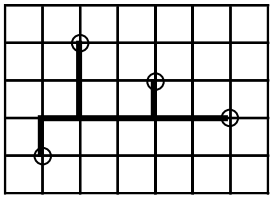









最も短い結び方・３　１１通り

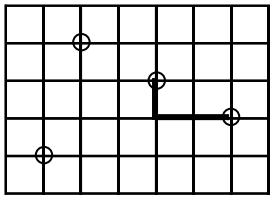
最も短い結び方では，図①のように９の長さになります。よって，９の長さの結び方を，場合分けて調べていきます。

右側の２つの点の結び方に注目をすると，図②～④に分けることができます。

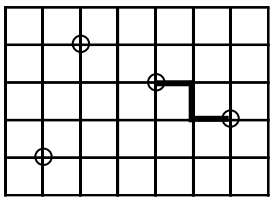
図①



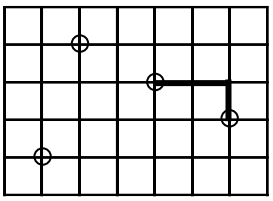
図②



図③

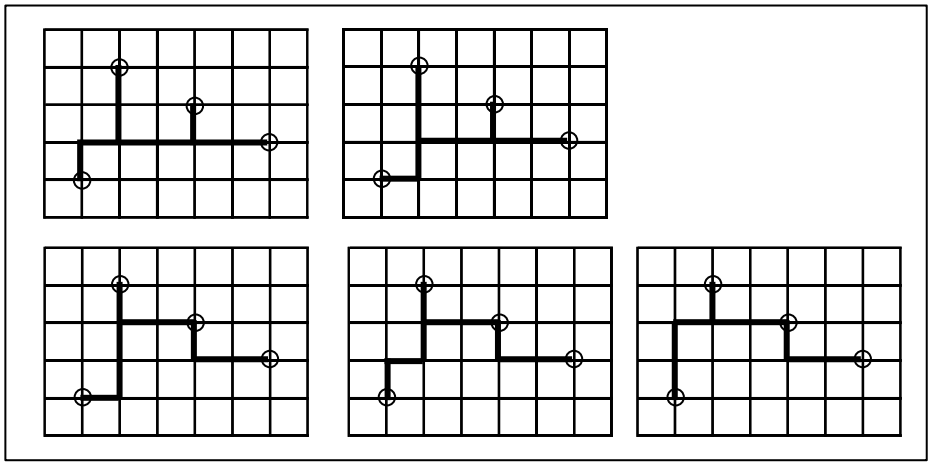


図④



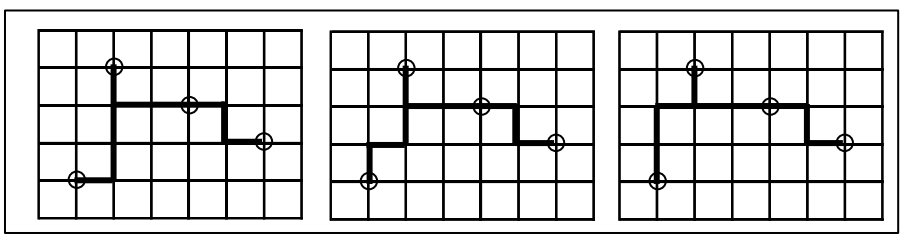
図②の場合は，図⑤の５通りが考えられます。

図⑤



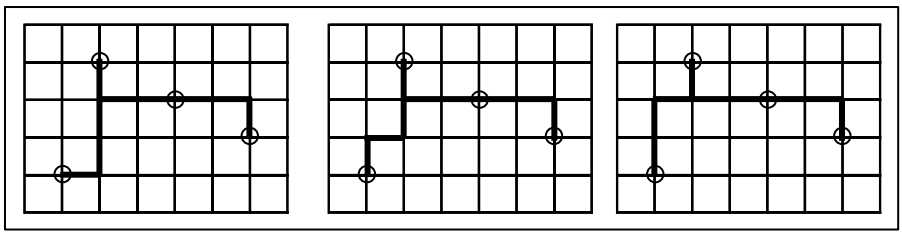
図③の場合は，図⑥の３通りが考えられます。

図⑥



図④の場合は，図⑦の３通りが考えられます。

図⑦



以上より，５＋３＋３＝１１（通り）です。