It is the Great War. CAPTAIN EAST is at one end of the stage, CAPTAIN WEST at the other. These are two separate locations at either end of a long line of trenches.

Enter two carrier PIGEONS, one at each end of the stage. They stand to attention.
PIGEONS (waving their wings) Coooo!
CAPTAINS Ah, a message from headquarters!
The PIGEONS pass a letter to each captain.
CAPTAINS Thank you. Dismissed.
The PIGEONS and CAPTAINS salute each other. Exit PIGEONS. The CAPTAINS study their letters.
COLONEL NORTH (voicing the letters, offstage)
Dear Captain East and Captain West,
I know you'll be delighted to hear: it's time for the big push. Your regiment and West's will go over the top tomorrow, one at 0600 hours while Jerry's still napping. When you reach the enemy trenches, you'll hoist the flag and the other regiment will join you. I'll leave it you to decide who has the honour of going first - I don't like to have favourites. Good luck.

Colonel North
CAPTAIN WEST Dash it all! It's only two weeks before my leave. Whoever goes first will get cut to ribbons.
CAPTAIN EAST Bother! My trench foot is coming along nicely. Another two weeks and I'd be in a nice hospital.
CAPTAIN WEST Better ring East and sort out who's going be massacred. (Picks up phone) Get me Captain East, please. (Aside) East has a very quick mind, but I don't trust him.

Phone rings at Captain East's end
CAPTAIN EAST It's Captain West? Yes, put him through. (Aside) West is a clever man, but I don't trust him.
CAPTAIN WEST Hello East. Rum show, these orders. I suppose we should toss a coin to see who goes first?
CAPTAIN EAST (quickly) Right-ho. I've a sixpence. Heads or tails?
CAPTAIN WEST Heads. Er... Hang on a moment. I feel awfully rum saying this, old chap, but... how the devil can I know, if you say it's tails, that it really is, and that you're not just saying so to save your own skin.

CAPTAIN EAST (looking disappointed) I resent the accusation. However, if you have some other suggestion, I shall listen to it.

CAPTAIN WEST How about we each choose a number and whoever is first to work out what they are multiplied together wins?

CAPTAIN EAST That would hardly be fair. Mathematics was never my subject. And I believe you were an accountant before the war. No, it must be something that is pure chance, $50 / 50$, just like tossing a coin.

CAPTAIN WEST And it needs to be something decisive. We can't keep arguing about it.
CAPTAIN EAST And one more thing, if you don't trust me to toss a coin, I don't trust you either. So it has to be impossible to cheat.

CAPTAIN WEST Hmmm...
CAPTAIN EAST Hmmm...
CAPTAIN WEST Hmmmmmmmm...

## Heads

The challenge is trickier than it first appears. Tossing a coin is a remarkably fair way of determining something by chance:

- It's 50/50.
- It's always one thing or the other - you know who has won.
- You can't cheat.
- Skill, knowledge and timing have no effect on the result.
- It makes no difference who tosses the coin.
- You can't dispute it.
- You cannot gain an advantage by calling heads or tails.
- You cannot gain an advantage by practising

For all these reasons, you can use tossing a coin as a decision mechanism even if both players have strong incentives to cheat and neither player trusts the other. The challenge is to find another decision mechanism that meets these criteria. There are additional constraints in the situation:

- They can only use sound
- They cannot send human messengers to each other.
- Each will cheat if he can, and each expects the other to cheat if he can.

The best way to run this exercise is to act it out, and then split into groups to attempt to come up with solutions. Those solutions can then be acted out, and everyone has to see if there's a way to cheat etc. and what would have to change to remedy it.

I am going to be cruel here and not post a solution. There is at least one which would work, and in theory I think that there are an infinite number of solutions, though they would get pretty complicated. I will, though, respond (it may take a few days while I'm out in the wilds) to emails or text messages to tell you if you are getting warm or have found a solution. Jason@thephilosophyman.com or 07843555355.

