

Read the case below to find the evidence to identify the innocent and guilty suspects. Remember, the story and suspects' statements are true.

The Pirates' Golden Treasure

¹Captain Sharky gives a total of 240 gold coins to four of his crew members: the Quartermaster, the First Mate, the Pilot, and the Boatswain. ²The Captain gives one fifth of the 240 coins to the Quartermaster. ³He gives twice as many coins to the First Mate as he does to the Quartermaster. ⁴He gives one sixth of the 240 coins to the Pilot. ⁵He gives the remaining of the 240 coins to the Boatswain. ⁶Later that day, one of these four crew members steals an additional 11 gold coins from Captain Sharky's private stash (separate from the 240 coins the Captain just gave out). ⁷The four crew members have no coins other than what they just received from Captain Sharky (plus the stolen coins for one crew member). ⁸The Cabin Boy hears a rumor about the 11 stolen coins and tells Captain Sharky. ⁹The Captain puts all four of the crew members blindfolded on the plank and questions them. ¹⁰Their answers apply to the actual number of gold coins each crew member has (including the added 11 stolen coins for one of the crew members). ¹¹After hearing their statements, the Captain lets three of the crew members go back onto the ship. ¹²The remaining crew member on the plank finally confesses to taking the 11 gold coins and begs for the Captain's mercy. ¹³The Captain does not make the thief walk the plank, but instead takes back all of the thief's gold coins.



Quartermaster

¹⁴I saw the Boatswain divide his gold coins into 5 equal piles, one pile for each of his 5 daughters, and he ended up with 1 coin left over.



First Mate

¹⁵The Quartermaster told me he is planning on giving a third of his coins to his ailing sister, and that he'll still have 32 coins left over.



Pilot

¹⁶The First Mate told me he needs just 4 more gold coins and then he will have 25 coins for each of his sons.



Boatswain

¹⁷I saw the Pilot divide his coins into 6 equal piles, one pile for each of his 6 children, and he ended up with 3 coins left over.

Use mathematical reasoning to describe the best evidence for your conclusions. Refer to the sentence numbers and show calculations when needed.

The Innocent

Suspect Name: _____

Suspect Name: _____

Suspect Name: _____

The Guilty

Suspect Name: _____