

Andy's Marbles

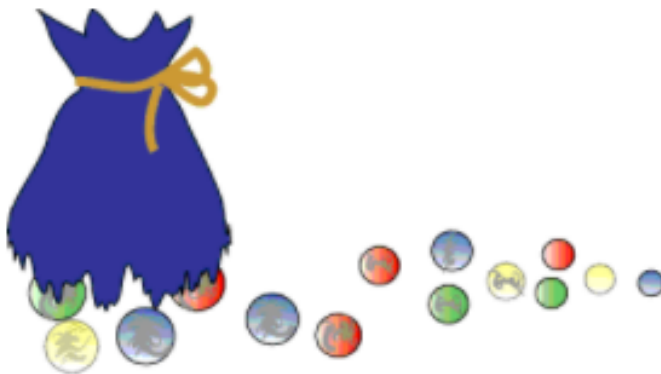
Age 7 to 11

Challenge Level ★★

Andy and his friend Sam were walking along the road together. Andy had a big bag of marbles.



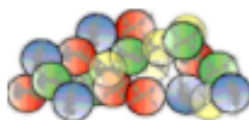
Unfortunately the bottom of the bag split and all the marbles spilled out. Poor Andy!



One third ($\frac{1}{3}$) of the marbles rolled down the slope too quickly for Andy to pick them up. One sixth ($\frac{1}{6}$) of all the marbles disappeared into the rain-water drain.

Andy and Sam picked up all they could but half ($\frac{1}{2}$) of the marbles that remained nearby were picked up by other children who ran off with them.

Andy counted all the marbles he and Sam had rescued.



He gave one third ($\frac{1}{3}$) of these to Sam for helping him pick them up. Andy put his remaining marbles into his pocket. There were 14 of them.

How many marbles were there in Andy's bag before the bottom split?

What fraction of the total number that had been in the bag had he lost or given away?

