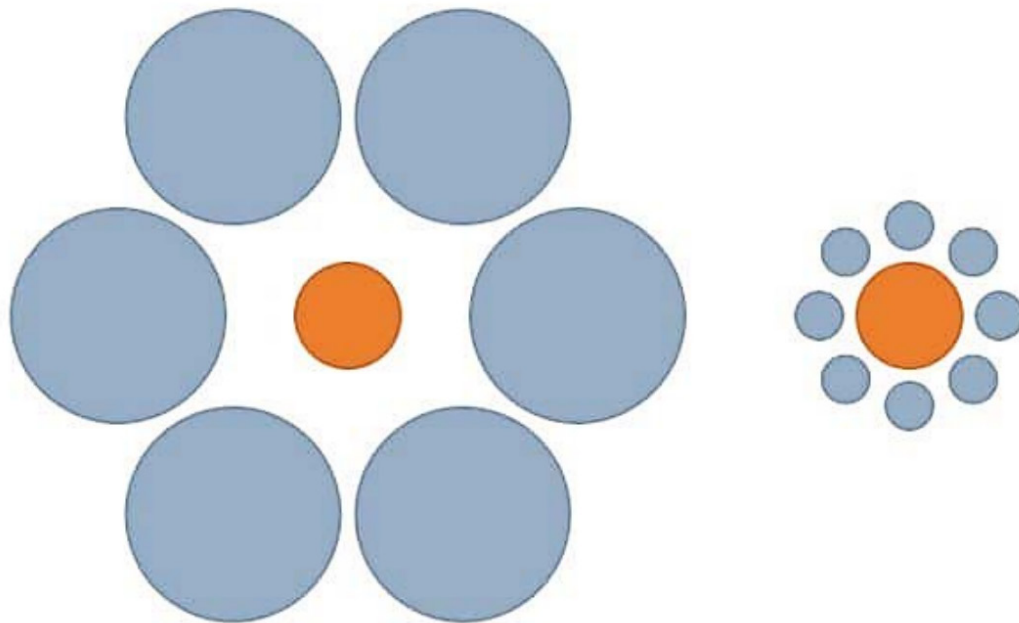
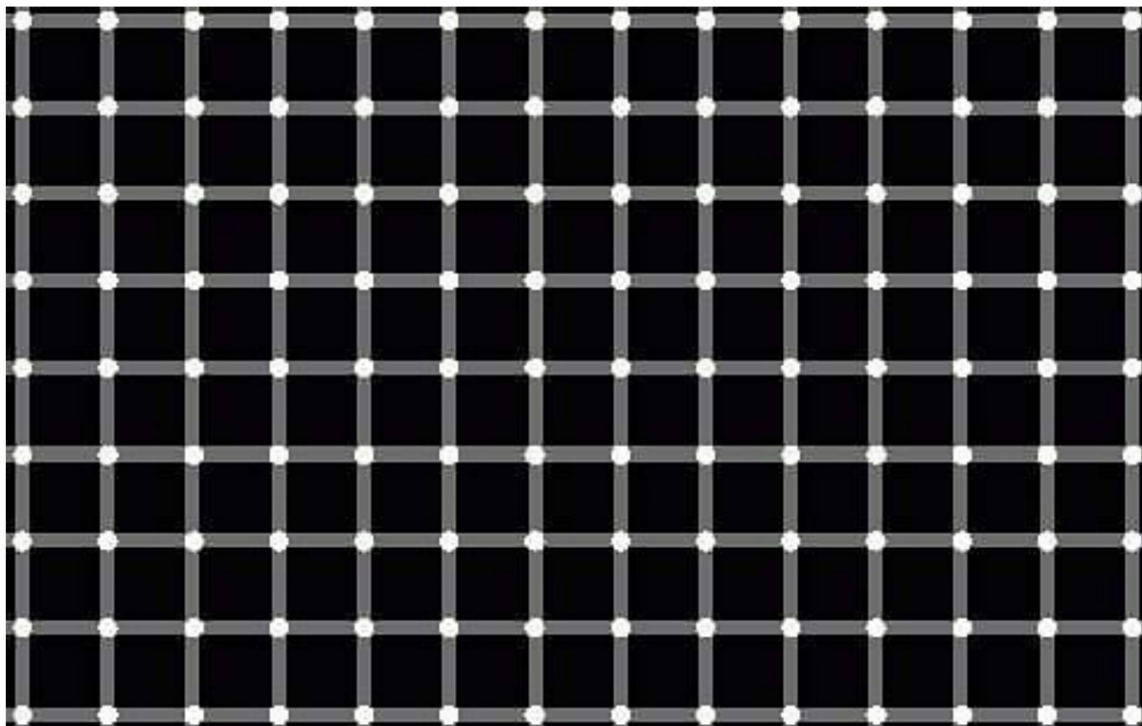


Are the orange circles same size?



How many black dots are there?



ARVO is the largest and most respected eye and vision research organization in the world, with nearly 10,000 members from more than 75 countries. Our mission is to advance research worldwide into understanding the visual system and into preventing, treating and curing its disorders. This is done through meetings, education, partnerships, fellowships and programs that drive collaboration, innovation and the advancement of eye and vision science with a goal of saving sight. Learn more at ARVO.org.

Answers

Are the orange circles same size?

They are the same size. This is the Ebbinghaus illusion, an optical illusion of relative size perception. The size differences are caused by the shapes, visual cues, surrounding the circles and the way the brain processes these.

Illusion image by [Hermann Ebbinghaus](#) (sometimes called the “Titchener illusion”)

How many black dots are there?

This is the scintillating grid illusion, discovered by E. Lingelbach in 1994. It looks like there’s a black dot inside each white circle. Once you focus on each individual white circle, you’ll realize that it was never there.

Scintillating grid illusion by [E. Lingelbach](#)