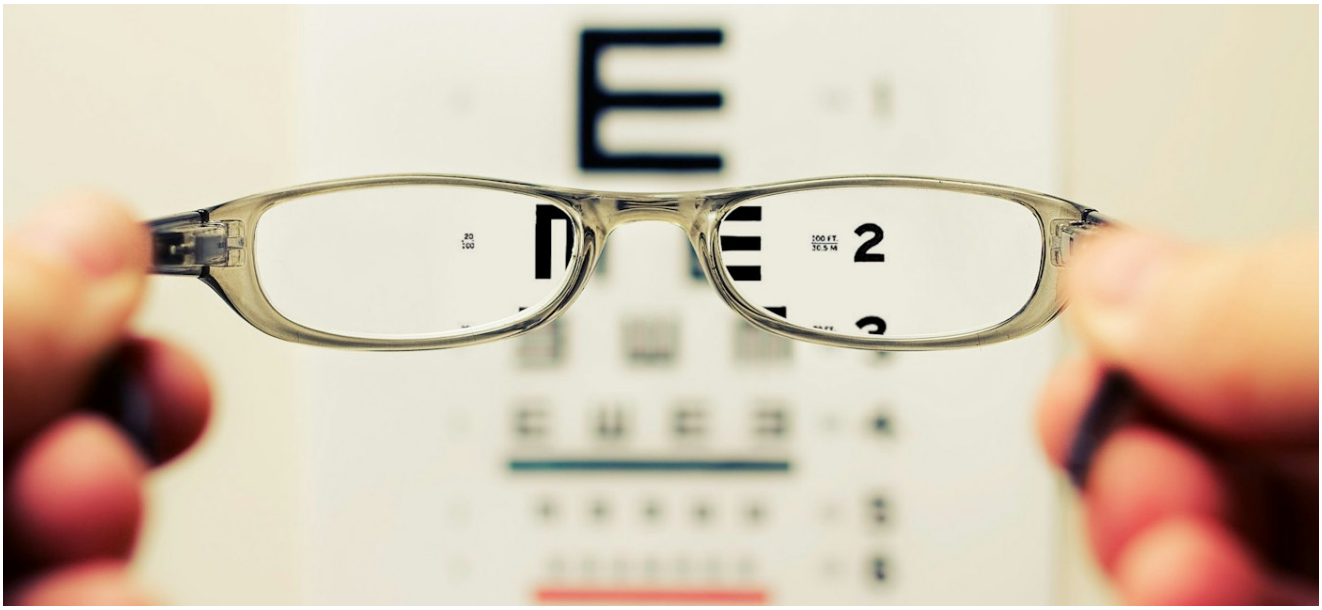
What Does 20/20 Vision Actually Mean?

20/20 is normal acuity, not perfect eyesight, and its metric equivalent is 6/6. What the fraction measures, and where 20/40 and 20/20 are legal thresholds.

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Online version: https://appstoryo.com/en/blog/what-does-20-20-vision-actually-mean



20/20 vision means you read at 20 feet the same line a person with normal sight reads at 20 feet. It is normal acuity, not perfect eyesight, and its metric equivalent is 6/6. Sight Check: Eye Chart Game is a free iOS and Android chart-style game, 54.8 MB, for practising those shrinking rows at home.

Disclosure: AppStoryo is operated by the studio that develops Sight Check: Eye Chart Game. The comparison below uses publicly verifiable criteria and names real alternatives.

You can try the rows in Sight Check: Eye Chart Game on the App Store or on Google Play, where it is listed as Sight check game.

What does the 20/20 fraction actually measure?

It is a ratio of distances, not a percentage or a score. The American Academy of Ophthalmology explains that the top number is how far in feet you stand from the chart, and the bottom number is the distance at which a person with normal sight reads the same line you just read. Matching numbers mean your distance vision matches the reference, and nothing more.

MedlinePlus states it the other way: 20/40 means the line you read at 20 feet is one an average eye reads from 40 feet. So the bottom number is how far back an average eye could have stood - three times your distance at 20/60, ten times at 20/200. Acuity measures one narrow thing: how fine a detail you resolve at distance.

Why is the chart read from 20 feet, and what is 6/6?

Hermann Snellen, a Dutch eye doctor, developed the chart in the 1860s at the request of his colleague Franciscus Donders. Twenty feet is close enough to optical infinity that the eye relaxes instead of focusing inward. MedlinePlus gives the distance as 20 feet, or 6 metres - the entire explanation for 6/6, the notation a clinic outside the United States writes. 6/6 is 20/20 and 6/12 is 20/40. Short rooms use a mirror, with the same results.

Which jobs set a legal acuity number?

Here 20/20 stops being folklore and becomes regulation. Under 49 CFR 391.41(b)(10), a United States commercial driver needs distant acuity of at least 20/40 in each eye with or without lenses, binocular acuity of at least 20/40, a field of at least 70 degrees in the horizontal meridian in each eye, and the ability to recognise standard red, green and amber traffic signals.

Aviation is stricter. 14 CFR 67.103 requires a first-class airman medical certificate applicant to show distant acuity of 20/20 or better in each eye separately, plus near vision of 20/40 at 16 inches; applicants aged 50 or older must also meet 20/40 at 32 inches. Those rules are the only places where 20/20 is a pass mark rather than a description.

Is 20/20 the same as perfect vision?

No, and that is the usual misreading. 20/20 is normal - a mid-range reference point, not a ceiling, since plenty of people measure 20/15 or 20/10. It also says nothing about colour vision, depth perception, peripheral field, contrast sensitivity or eye pressure, which is why an exam measures several things and a chart measures one.

The World Health Organization reports at least 2.2 billion people with a near or distance vision impairment, and at least 1 billion cases that were preventable or remain unaddressed: presbyopia 826 million, cataract 94 million, uncorrected refractive error 88.4 million. The National Eye Institute puts refractive errors at more than 150 million Americans, many unaware they could see better.

What does Sight Check: Eye Chart Game actually do?

It is a game, and its listing says so. Sight Check: Eye Chart Game shows rows of shrinking letters you read aloud from across the room, saves your score against a personal best, and keeps results on the device. It is free, 54.8 MB, rated 12+, version 1.0 from 15 July 2026, ad-free, and listed in English only. The listing is also the honest limitation, in the developer's own words on the App Store:

> Sight Check is designed purely for entertainment and casual challenge. It is not a medical device, does not diagnose any condition, and is not a substitute for a professional eye exam.

Take that as the scope statement it is. It can show you that the fifth row blurred this year when it did not last year - a useful prompt to book an appointment. It cannot tell you your refraction.

Which app should you actually use?

Choose Virtual Vision Test if you want a prescription outcome

- Warby Parker's test, version 52.0.0 updated 8 June 2026, is the only one here tied to a clinical pathway: it renews an existing glasses or contacts prescription.
- Free, 70.5 MB, needs iOS 16.0 or later, and holds a 4.76 average from 19,080 ratings - far more real-world use than anything else listed.
- It wins outright if you want a document, not a score.

Choose OcularCheck: Acuity Exam if you want a screening tool

- Published by Project ORBIS International, the eye-care non-profit; version 2.2.0 dated 8 October 2024, free, and just 2.3 MB - the smallest download here by a wide margin.
- Needs iOS 17.0 or later, and its 3.8 average rests on only 15 ratings, so the sample is thin while the provenance is clinical.
- It wins for screening on low bandwidth.

Choose Kay iSight Test Professional if you are testing a young child

- Kay Pictures Ltd has made picture optotypes for decades; version 7.1 dated 2 February 2026, free, 22.2 MB, a 4.4 average from 10 ratings.
- It needs iOS 18.6 or later, ruling out older hardware, but picture charts work for a child who cannot yet read letters - which no letter chart can do.
- It wins outright for pre-literate children.

Choose Sight Check: Eye Chart Game if you want the chart as a game

- Free, 54.8 MB, ad-free, results kept on the device, and on both iOS and Android, where the three above are iPhone and iPad only.
- It is the only one of the four that is explicitly a casual game, which makes it honest for family play and wrong for anything clinical.

When is a phone eye chart the wrong tool?

Three situations. First, if anything changed suddenly - vision lost in one eye, new flashes or floaters, pain, double vision - because acuity apps measure a steady state and are blind to an acute event. Second, if you need a number that counts: the 20/40 driving floor and the 20/20 airman standard are measured by an examiner under controlled conditions. Third, for a child, where an uncalibrated screen at an uncontrolled distance yields a number that means little.

With that understood, Sight Check: Eye Chart Game is a reasonable way to watch your own distance vision between appointments - on the App Store and on Google Play as Sight check game, free, with results staying on your phone.

Frequently asked questions about 20/20 vision

What does 20/20 vision mean in simple terms?

You read a line at 20 feet that a person with normal sight also reads at 20 feet. The top number is your distance from the chart, the bottom one the distance an average eye reads that line from. Matching numbers mean average distance vision.

Is 20/20 vision perfect vision?

No. It is normal rather than perfect and sits mid-range: 20/15 and 20/10 are better. Acuity also ignores colour vision, depth, peripheral field and eye pressure, so a 20/20 result is not a clean bill of eye health.

What is 20/20 in metric notation?

It is 6/6, because 20 feet is about 6 metres. MedlinePlus gives the standard distance as 20 feet, or 6 metres, and treats 20/20 and 6/6 as the same normal result. By the same conversion 20/40 is written 6/12.

What does 20/40 vision mean?

The smallest line you read at 20 feet is one an average eye reads from 40 feet, so you stand twice as close for the same detail. MedlinePlus states that directly, and 20/40 is the legal floor for United States commercial drivers.

Why is the eye chart tested from 20 feet?

At 20 feet the eye relaxes rather than focusing inward, so the test approximates distance vision. Snellen designed the chart around that distance in the 1860s. Clinics with short rooms use a mirror, with the same results.

What acuity do you need to drive a truck?

Under 49 CFR 391.41(b)(10) a commercial driver needs at least 20/40 in each eye, 20/40 binocular, a field of at least 70 degrees in the horizontal meridian in each eye, and recognition of red, green and amber signals.

Do pilots need 20/20 vision?

For a first-class airman medical certificate, yes. 14 CFR 67.103 requires 20/20 or better in each eye separately, plus near vision of 20/40 at 16 inches. Applicants aged 50 or older must also meet 20/40 at 32 inches.

Can a phone app measure my visual acuity accurately?

Not reliably. Acuity depends on viewing distance, screen size and brightness, and a phone leaves all three to you while a clinic fixes them. It can show a change over time, but the number it prints is not a clinical measurement.

Does missing a letter change my result?

Usually not. MedlinePlus states that if you miss one or two letters on the smallest line you

can read, you still count as having vision equal to that line. Scoring tolerates a few errors, so two readings of one eye can differ.

Is Sight Check: Eye Chart Game a medical device?

No. Its App Store listing states it is designed purely for entertainment and casual challenge, is not a medical device, does not diagnose any condition, and is not a substitute for a professional eye exam. Treat the score as a game result.

Cite as: Lubor Šimůnek (2026). *What Does 20/20 Vision Actually Mean?*. AppStoryo, lapnito.cz s.r.o..
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