## Errata for Fundamentals of Geometrical Optics by Virendra Mahajan

p. 14, line after Eq. (1-17) The word "reflected" should be "refracted".
p. 24, end of Section 1.6.10
p. 48, first paragraph
p. 55, last paragraph
p. 66, Eq. (2-35b)
p. 66, Fig. 2-21

The reference to Eq. (8-1) should refer to Eq. (8-5).

The reference to Eq. (2-7) should refer to Eq. (2-9).

The theta and theta prime should be transposed.
$n$ should not have a subscript.

The corrected figure appears below:

p. 69, Eq. (2-48)

The final part of the equation should have a minus sign:

$$
=-\frac{S\left(S+2 f^{\prime}\right)}{\left(S+f^{\prime}\right)^{2}}
$$

p. 85, Eqs. (2-97) and (2-98)
p. 97, Eq. (2-115a)
p. 99, second line of Section 2.7.3

The variable $n_{j}^{\prime}$ should be removed.

The minus sign before the final part of the equation should be removed.

The reference to Eq. $(2-100)$ should be (2-121a), and the reference to Eq. (2-104a) should be (2-117).
p. 125, Fig. 3-4b

The corrected figure appears below:

p. 128, Fig. 3-6 The corrected figure appears below:

(a)
p. 137, Fig. 3-12

The corrected figure appears below:

p. 144, Problem 3.2
p. 156, Fig. 4-7

The problem description has been updated: "A curved mirror is used on the passenger side of an automobile to reduce its blind spot. (a) Explain if this mirror is concave or convex, and illustrate how such a mirror reduces the blind spot. (b) Explain why it has the inscription that 'Objects in the mirror are closer than they appear.'"

The corrected figure appears below:

p. 157 , Fig. $4-8$ (b)

The corrected figure appears below:
p. 160, Fig. 4-9
p. 165, last sentence
p. 167, second sentence
p. 170, second paragraph
p. 170, first paragraph

There should be a horizontal line running through point $F$ and point $\mathrm{C}_{1}$.

The reference to Fig. 4-11 should refer to Fig. 4-12.

The references to Eqs. (4-40) and (4-43) should refer to Eqs. (449) and (4-52).

The words "outermost" and "innermost" should be transposed.

The equation should read $t_{1}=f_{1}^{\prime}-f_{2}^{\prime}$
p. 172, first paragraph
p. 200, line 21
p. 253, Eq. (6-9)
p. 288, second line of Section 7.4
p. 290
p. 327, Eq. (8-26)
p. 338, Table 8-3
p. 339
p. 340, Table 8-4
p. 383, first sentence
p. 384, second paragraph
p. 420, Problems

The in-text equation should say $-\beta_{0} t_{1}\left(2+t_{1} / f_{2}^{\prime}\right)$.

The unnumbered equation after Eq. (5-4) should read $d S_{1}=I d \Omega$.
The correct equation should read:
$f^{\prime}=-\frac{f_{o}^{\prime} f_{e}^{\prime}}{L}$
The reference to Eq. (2-97) should refer to (2-114).
The reference to Eq. (2-97) should refer to (2-114), and the reference to Eq. (2-96a) should refer to (2-113a).

The variable $h$ in the second part of the equation should be $h^{\prime}$.

The numbers in the last column should be $\lambda / 3.97, \lambda / 4.7, \lambda / 3.33$, $\lambda / 3.84$, and $\lambda / 6.65$.

The reference to Eq. (4-60) should refer to Eq. (8-60).
The numbers in the last column should be $1.01 \lambda, 0.64 \lambda$, and $0.37 \lambda$.

The reference to Eq. (8-1) should refer to Eq. (8-5).
The references to Eqs. (4-7) and (4-15b) should refer to Eqs. (97) and (9-11b), respectively.

In Problem 9.1, the reference to Problem 2.5 should refer to Problem 2.6; a second sentence should be added: "Let its diameter be 1.5 cm ." In Problem 9.3, the reference to Problem 7.2 should refer to Problem 9.2. In Problem 9.5, the reference to Problem 7.4 should refer to Problem 9.4.

