

EX. 3.8

Q1- Estimate the product by rounding up one factor and rounding down the other factor.

(a) 68×96

$$68 < 96$$

68 rounds down to 60

96 rounds up to 100

$$\text{So, the estimated product} = 60 \times 100 \\ = 6000$$

(b) 52×44

$$52 > 44$$

52 rounds up to 60

44 rounds down to 40

$$\text{So, the estimated product} = 60 \times 40 = 2400$$

(c) 316×127

$$316 > 127$$

316 rounds up to 320

127 rounds down to 120

$$\text{So, the estimated product} = 320 \times 120 \\ = 38400$$

R.w'

320

$\times 120$

000

640 X

320 X X

38400

(d) 674×832

$$832 > 674$$

832 rounds up to 840

674 rounds down to 670

$$\text{So, the estimated product} = 840 \times 670 \\ = 562800$$

840

$\times 670$

000

5880 X

5040 X X

562800

Q2. Estimate the product by rounding off the numbers to the nearest tens.

(a) 94×38

94 rounded off to the nearest tens as 90.

38 rounded off to the nearest tens as 40

Estimated product = 90×40

$$\begin{array}{r} 90 \\ \times 40 \\ \hline 00 \\ 360 \times \\ \hline 3600 \end{array}$$

R.W

70

$\times 30$

00

2100

2100

(b) 67×25

67 rounded off to the nearest tens as 70

25 rounded off to the nearest tens as 30

Estimated product = 70×30

$$= 2100$$

370

$\times 50$

000

18500

18500

(c) 372×51

372 rounded off to the nearest tens as 370

51 rounded off to the nearest tens as 50

Estimated product = $370 \times 50 = 18500$

(f) 103×157

103 rounded off to the nearest tens as 100

157 rounded off to the nearest tens as 160

Estimated product = $100 \times 160 = 16000$

100

$\times 160$

000

6000

10000

16000

Note: Do Q1 → c, d, g and h parts and
Q2. c, d, g, and h parts in homework.