Example 9 ◀) Self Tutor

Round off to the nearest 10:

   a 48   **b** 583   **c** 5705

  a $48 \approx 50$ {Round up, as 8 is greater than 5}

  b $583 \approx 580$ {Round down, as 3 is less than 5}

  c $5705 \approx 5710$ {5 is rounded up}

Example 10 ◀) Self Tutor

Round off to the nearest 100:   **a** 452   **b** 37 239

  a $452 \approx 500$ {5 is rounded up}

  b $37\,239 \approx 37\,200$ {Round down, as 3 is less than 5}

Example 11 ◀) Self Tutor

Round: **a** 3.27 to one decimal place   **b** 6.3829 to two decimal places.

  a 3.27 has 2 in the *first* decimal place
         and 7 in the *second* decimal place.
    Since 7 is in the second decimal place and is greater than 5, we increase the digit in the first
    decimal place by 1 and delete what follows. So, $3.27 \approx 3.3$

  b 6.3829 has 8 in the *second* decimal place
         and 2 in the *third* decimal place.
    Since 2 is less than 5, we retain the 8 and delete all digits after it.
    So, $6.3829 \approx 6.38$

Example 12 ◀) Self Tutor

Calculate, to 2 decimal places:

  a $(2.8 + 3.7)(0.82 - 0.57)$ **b** $18.6 - \dfrac{12.2 - 4.3}{5.2}$

TI-84 Plus

```
(2.8+3.7)*(0.82-
0.57)
             1.625
18.6-(12.2-4.3)/
5.2
       17.08076923
```

  a $(2.8 + 3.7)(0.82 - 0.57) = 1.625$
                          ≈ 1.63

  b $18.6 - \dfrac{(12.2 - 4.3)}{5.2} \approx 17.080\,769\,23 \ldots$
                                 ≈ 17.08