

1. Use digits to write the number twenty-three million, six hundred eighty-five. **23 000 685**
2. The following number is written in expanded form. Write it in standard form. **302 730 905**

$$3 \cdot 100\,000\,000 + 2 \cdot 1000\,000 + 7 \cdot 100\,000 + 3 \cdot 10\,000 + 9 \cdot 100 + 5 \cdot 1$$

3. Rounding.

(a) Round 403 283 to the nearest hundred. **403 300**

(b) Round 403 283 to the nearest thousand. **403 000**

4. The sides of a rectangle are 100 in and 250 in long

(a) Find the perimeter of the rectangle. Include units in your answer. **$P = 700$ in**

(b) Find the perimeter and area of the rectangle. Include units in your answer. **$A = 25\,000$ in²**

5. Find the average of 11, 0, 12, 5, 14, and 12. **9**

6. Andy is reading a book 250 pages long. The first day he read 80 pages. The second day he read 55 pages. How many pages does he need to read on the third day if he wants to finish the book?

115 pages

7. Perform the following divisions. Express your answer by giving the quotient and the remainder. For example, $17 \div 5 = 3 \text{ R } 2$.

(a) $216 \div 11 =$ **19 R 7**

(b) $296 \div 12 =$ **24 R 8**

8. Perform the following operations. Show all steps.

(a) $8 - 2 + 4 - 5 =$ **5**

(b) $4 \cdot 5 - 2 =$ **18**

(c) $10^2 - 3 \cdot (2^2 - 3) (3^2 - 2^3) (5^2 - 2^2) =$ **37**

(d) $3 + 7 \cdot 2 - 8 \div 2 =$ **13**

(e) $(2 + (2^3 - 2^1))^2 - 18 \div 3 \cdot 2 =$ **52**

(f) $5 \cdot (20 - 50 \div 5) - ((7^2 + 1) \div 25)^2 + 4 \cdot 3 =$ **58**

(g) $\frac{2^3 + 2^1}{7 - 2^2 + 2} + 14 =$ **16**

(h) $\frac{2 + 5^2 - 2 \cdot 3}{1 + 2 \cdot (2^2 - 1^2)} - \frac{2^4 - 2^3 + 2^2}{4^2 - 2 \cdot 5} =$ **1**

(i) $1 + (2^2 - 2^1) \cdot (7 - 3) + 4 - (5 - 2)^2 =$ **4**

(j) $\frac{3(5^2 - 2^2)}{(5 - 2)^2} =$ **7**

(k) $32 - \frac{2 \cdot 11 - 4}{3^2 - 3} =$ **29**