Warm Up

1. Use the powers of base 10 to write each number.

a) 34 921

b) 906 205

2. Write the number in standard form.

$(2x10^5) + (4x10^4) + (9x10^3) + (3x10^1) + (8x10^0)$

solutions

Warm Up

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$(2x10^5) + (4x10^4) + (9x10^3) + (3x10^1) + (8x10^0)$

$(3\times10^4)+(4\times10^3)+(9\times10^2)+(2\times10^1)+(1\times10^0)$

$(9\times10^5)+(6\times10^3)+(2\times10)^2+(5\times10^0)$

$2\times100000 + 4\times10000 + 9\times1000 + 3\times10 + 8\times1$

$200\,000 + 40\,000 + 9000 + 30 + 8$

$249\,038$

Homework questions

Section 2.3

24. a) $1^3 = 1^2$

$1^3 + 2^3 = 3^2$

$1^3 + 2^3 + 3^3 = 6^2$

$1^3 + 2^3 + 3^3 + 4^3 = 10^2$ $\quad 1+8+27+64=100$

$1^3 + 2^3 + 3^3 + 4^3 + 5^3 = 15^2$ $\quad 1+8+27+64+125=225$

24. b) $3^2 - 1^2 = 2^3$ $\quad 9-1=8$

$6^2 - 3^2 = 3^3$ $\quad 36-9=27$

$10^2 - 6^2 = 4^3$ $\quad 100-36=64$

$15^2 - 10^2 = 5^3$ $\quad 225-100=125$

$21^2 - 15^2 = 6^3$ $\quad 441-225=216$

22. $5 \times 4^2 - (2^3 + 3^3) \div 5$

$5 \times 4^2 - (8+27) \div 5$

$5 \times 16 - (35) \div 5$

$= 80 - 7$

$= 73$

Concept Reinforcement

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