Chapter 5 Exam v2

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Letting W stand for the set of whole numbers, I the set of integers, I+ the set of positive integers, and I⁻ the set of negative integers, perform the indicated operation.

    1) Find W – I   1) _____

        A) I+   B) ∅   C) I⁻   D) I

Compute or simplify as much as possible.

    2) 2 – 5   2) _____

        A) 7   B) ⁻3   C) ⁻7   D) 3

Find the quotient.

    3) 9212 ÷ ⁻47   3) _____

        A) 196   B) 47   C) ⁻196   D) ⁻47

Simplify.

    4) $\left|{}^{-}2\right|$ 4) _____

        A) ⁻2   B) 0   C) 2   D) ±2

Add.

    5) 3 + ⁻9   5) _____

        A) ⁻12   B) 6   C) ⁻6   D) 12

Compute.

    6) ⁻2^3 6) _____

        A) ⁻16   B) 4   C) 8   D) ⁻8

Compute using a calculator.

    7) ⁻7 + 2   7) _____

        A) ⁻5   B) 9   C) 5   D) ⁻9

For the arithmetic sequence, find the difference and write the next two terms.

    8) c + 2d, c + d, c, c – d   8) _____

        A) d = d, next terms: c – 2d, c – 3d   B) d = ⁻d, next terms: c – 3d, c – 4d

        C) d = d, next terms: c – 3d, c – 4d   D) d = ⁻d, next terms: c – 2d, c – 3d

Determine whether the statement is true, false, or sometimes true.

    9) If x is positive and y = ⁻x, then xy is negative.   9) _____

        A) True   B) Sometimes true   C) False

Perform the indicated computation.

    10) 6 – ⁻13 + ⁻5   10) _____

        A) ⁻14   B) ⁻2   C) 2   D) 14

Find the quotient.

11) $^-16 \div 2$ 11) _____

    A) 2   B) $^-8$ C) 8   D) $^-2$

Write as an addition problem and find the sum.

12) Jack's checking account was overdrawn by $95. He deposited $44 into his account. What is the   12) _____
balance in his account?

    A) $^-\$95 + \$44 = {^-}\$51$ B) $\$95 + \$44 = \$139$

    C) $\$95 + {^-}\$44 = {^-}\$51$ D) $^-\$95 + {^-}\$44 = {^-}\$139$

Find the additive inverse.

13) ^-k 13) _____

    A) $k - 1$ B) k C) $\dfrac{1}{k}$ D) ^-k

Evaluate.

14) $(^-18 \div {^-3}) \div {^-3}$ 14) _____

    A) 18   B) 2   C) $^-2$ D) $^-18$

Compute.

15) $(^-2)^3$ 15) _____

    A) 8   B) $^-8$ C) 4   D) $^-16$

Evaluate.

16) $\left| ^-36 \right| \div (3 - 12)$ 16) _____

    A) 7   B) $^-4$ C) 4   D) $^-9$

Factor the expression, then simplify if possible.

17) $10x^2 + xy - x$ 17) _____

    A) $x(10x + y - 1)$ B) $x(10 + y)$ C) $10x^3 + y - 1$ D) $10x^3 + y$

Determine whether the statement is true, false, or sometimes true.

18) If x is positive and $y = {^-x}$, then xy^2 is positive.   18) _____

    A) True   B) False   C) Sometimes true

Solve the problem.

19) David's company has to ship 4950 boxes of sprinklers. If a truck can hold 550 boxes, how many   19) _____
truckloads does he need to ship all the boxes?

    A) 9 truckloads   B) 10 truckloads   C) 7 truckloads   D) 8 truckloads

Simplify.

20) $^-\left| 21 \right|$ 20) _____

    A) $^-21$ B) 0   C) 21   D) ± 21