

Operation Meanings and Real Numbers B2 (KEY)

Perform the indicated operations, and state the sets of real numbers to which the answer belongs.

- 1) $18/3$ 2) -9 3) 2.45 4) 0

R,Q,Z,W,N R,Q

- 5) $-\sqrt{23}$ 6) $5/16$ 7) $9/1$ 8) $\sqrt{16}$

R,I R,Q,Z,W,N

- 9) 7.23 10) $.63215\dots$

R,Q

Explain the meaning of the following operations.

- 11) $4 + 12$ - A set of 12 added to a set of 4.

- 12) 5×6 - 5 sets of 6 added together

- 13) $8^3 - 3$

- 14) $32 \div 4$ - 32 divided into groups of 4 or 4 groups.

- 15) Why is $32 \div 4$ defined? -

- 16) Why is $16 \div 0$ undefined? -

- 17) Why is $0 \div 0$ undefined? -

State the property of real numbers illustrated in each problem.

- 18) $5 + x = x + 5$ 19) $p(1) = p$ 20) $3(a - 4) = 3(a) - 3(4)$ 21) $j + (-j) = 0$

Multiplicative Identity Distributive

- 22) $b + (c + d) = (b + c) + d$ 23) $10(q) = q(10)$ 24) $z (1/z) = 1$

Associative (+) Commutative (x)

- 25) $7(4 \cdot g) = (7 \cdot 4)g$ 26) $t + 0 = t$

Associative (x)