

1-9 MULTIPLYING AND DIVIDING **INTEGERS**

The product of two integers with the same sign is positive.(multiplying)

The product of two integers with different signs is negative. (multiplying)

**The product of zero and any integer is zero.
(multiplying)**

$$\text{EX) } 3(4) = 12 \qquad 3(-4) = -12$$

$$-3(-4) = 12 \qquad -3(4) = 12$$

$$3(0) = 0 \qquad -4(0) = 0$$

Page 44

$$\text{EX) } -3 * 5 (-4) = 60 \qquad -2 (-3) (-2) =$$

$$4 (2) (-3) =$$

Quick Check

$$-4 * 8 (-2) = 64 \qquad 6(-3)(5) = -90 \qquad -7*(-14) * 0 = 0$$

The quotient of two integers with the same sign is positive. (dividing)

The quotient of two integers with different signs is negative. (dividing)

Division by zero is undefined.

EX) $12 \div 3 = 4$ $12 \div (-3) = -4$

$-12 \div (-3) = 4$ $-12 \div 3 = -4$

EX) $-32 \div 8 = -4$ $-48 \div (-6) = 8$ $-56 \div (-4) = 14$