

$$= (11)$$

2:30

## Section 2.4 Multiplying Integers

$$\begin{aligned} 2 \cdot 3 &= 6 \\ 2 \cdot 2 &= 4 \\ 2 \cdot 1 &= 2 \\ 2 \cdot 0 &= 0 \\ 2 \cdot (-1) &= -2 \\ 2(-2) &= -4 \\ 2(-3) &= -6 \end{aligned}$$

$$\begin{aligned} 2(-3) &= -6 \\ -3(2) &= -6 \end{aligned}$$

$$\begin{aligned} -5(3) &= -15 \\ -5(2) &= -10 \\ -5(1) &= -5 \\ -5(0) &= 0 \\ -5(-1) &= 5 \\ -5(-2) &= 10 \end{aligned}$$

positive • positive = pos

+	•	+	=	+
+	•	-	=	-
-	•	+	=	-
-	•	-	=	+
mult + division				

$$3 - (-4)$$

$$3 + 4 = 7$$

$$-5 + -2 = -7$$

ex: 22.  $4(-6) = -24$

24.  $5(-7) = -35$

26.  $17(-8)$   
 $= -136$

$$\begin{array}{r} 5 \\ 17 \\ 8 \\ \hline 136 \end{array}$$

$$34. (-9)(-3) = 27$$

$$36. (-5)(-1) = 5$$

3 or more numbers

$$46. 9(-3)(-4) \\ = 108$$

even number  
of negatives  $\rightarrow$  positive

$$50. -3(-5)(2)(-9) \\ = -15 \cdot 18 \\ = -270$$

odd number  
of negatives  $\rightarrow$  negative

$$\begin{array}{r} 4 \\ 18 \\ 15 \\ \hline 190 \\ 18 \\ \hline 270 \end{array}$$

Exponents

$$62. (-6)^3 \\ \text{base} = -6$$

$$(-6)(-6)(-6) \\ = -216$$

$$66. (-7)^4$$

$$= (-7)(-7)(-7)(-7) \quad \text{expand your exponents}$$

$$= 2,401$$

Calculator

$$(-2)^9 \quad (-2)^9 = -512$$

$$(-2)^6 = 64 \quad (-2)^6$$

$$-2^6 = -64$$

69.  $(-7)^2$  and  $-7^2$   
base is  $-7$       base is  $7$   
 $(-7)(-7) = 49$        $-7 \cdot 7 = -49$

72.  $(-11)^2$  and  $-11^2$   
 $(-11)(-11) = 121$        $-11 \cdot 11 = -121$

## Section 2.5 Dividing Integers

$$10 \cdot (-2) = -20 \qquad -20 \div 10 = -2$$

+	÷	+	=	+
+	÷	-	=	-
-	÷	+	=	-
-	÷	-	=	+

14.  $\frac{-10}{5} = -2$   
 $-10 \div 5 = -2$

20.  $42 \div (-6) = -7$

42.  $-80 \cancel{\phi} \div (-4 \cancel{\phi}) = 20$