Module #7 Test REVIEW! (Answers!)

1) $-7t - 1 = 20$

$+1 = +1$

$-7t = 21$

$t = -3$

2) $-2(x + 11) = -8$

$\div -2 \quad \div -2$

$x + 11 = 4$

$-11 = -11$

$x = -7$

3) Carlos wants to rent a video game console for $17.50 and some video games for $5.25 each. He has $49 to spend. How many games can he rent?

$17.50 + 5.25x = 49$

$-17.50 \qquad -17.50$

$5.25x = 31.50$

$\div 5.25 \quad \div 5.25$

$x = 6$ video games

4) A plumber charges his customers an hourly rate for labor as shown in the table. Customers are also charged for the cost of materials needed to complete the job. If Mr. Yoder will be charged for 6 hours of labor and $125 for materials, what is his total charge?

Hours	Labor Charge ($)
2	67.50
3	101.25
4	135.00
5	168.75

6 hours of labor: $67.50 + $135.00 → $202.50

Labor + Materials: $202.50 + $125 → $327.50 (total charge)

5) Jessica has a Nordstrom's gift card worth $75. The table shows the items that she has picked out so far.

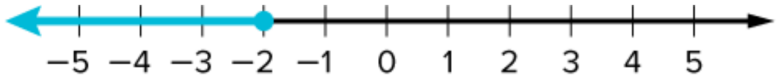
Item	Cost ($)
bracelet	8
sunglasses	15
beach towel	12
hat	10
sandals	14

Jessica also wants to buy two T-shirts. Write and solve an inequality to represent how much she can spend on the T-shirts.

$8 + $15 + $12 + $10 + $14 → $59.00
$59 + 2x ≤ 75
-59 -59
2x ≤ 16
÷2 ÷2
x ≤ $8 per t-shirt

6) $9x - 18 < 27$
+18 +18
9x < 45
÷9 ÷9
x < 5

7) $-11x \geq 22$ and GRAPH
÷-11 ÷-11
x ≤ -2



8) The difference between the high and low temperatures on Sunday was at least 35°F. The low temperature on Sunday was -8°F.

Write an inequality that represents the possible high temperatures, t, on Sunday.

t - (-8) ≥ 35 or t + 8 ≥ 35

9) Tom is making birdhouses to sell at a farmer's market. Each birdhouse requires 4.5 feet of wood planks to build, and he sells them for $19.75 each. If he has no more than 80 feet of planks to make birdhouses, how much money can Tom earn at the farmer's market?

$4.5x \leq 80$
$\div 4.5 \quad \div 4.5$
$x \leq 17.8$

***He has enough wood planks to make 17 birdhouses.**

17 x $19.75 → $335.75

***Tom can earn no more than $335.75.**

10) Julie has already earned $30 walking dogs. She earns $3 per dog walked, and she needs at least $80 to buy more leashes. Write and solve an inequality to determine how many more dogs Julie will need to walk to have at least $80.

$30 + 3x \geq 80$
$-30 \quad -30$
$3x \geq 50$
$\div 3 \quad \div 3$
$x \geq 16\ \frac{2}{3}$

***Julie will need to walk at least 17 dogs.**