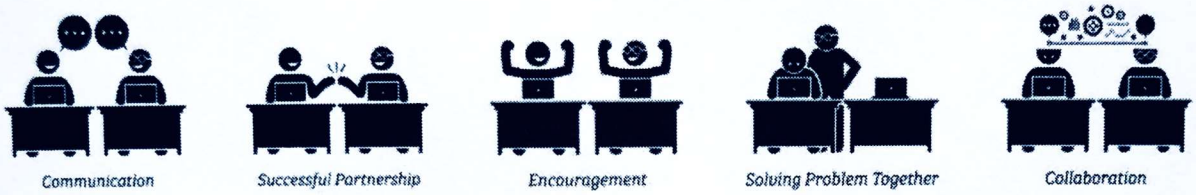
Name: ANSWERS! Period:



Lesson 9-4 Classwork

Calculators OK

Question 01

You want to buy two boxes of pancake mix, each costing \$3.50. You also want to buy five cartons of milk, each costing m dollars. You have only \$15 to spend. Which inequality models this situation?

a) $5m + 3.5 \leq 15$

b) $5m + 3.5 \geq 15$

c) $5m + .7 \leq 15$

d) $5m + 7 \geq 15$

2 boxes is \$7.00

Can be less than \$15 but cannot be more. Can equal \$15 too.

Question 02

In the question above, what is the maximum amount each carton of milk could cost if you were able to make your planned purchases?

\$ 1.60

$5m + 7 \leq 15$

$-7 \quad -7$

$5m \leq 8$

$m \leq 1.6$

Question 03

2 pairs is \$45

You want to buy two pairs of pants, each costing \$22.50. You also want to buy four shirts, each costing s dollars. You only have 100 to spend. Which inequality models this situation?

a) $4s + 45 \geq 100$

b) $4s + 45 \leq 100$

c) ~~$4s + 22.5 \leq 100$~~ oops!

d) $4s + 22.5 \geq 100$

Question 04

In the question above, what is the maximum amount each shirt could cost if you were able to make your planned purchases?

\$ 13.75

$4s + 45 \leq 100$

$-45 \quad -45$

$4s \leq 55$

$s \leq 13.75$

Question 05

A student wants to save at least $5,000 for college. The student already has $275 from birthday gift money. She plans to work at a store for $20 per hour to save the rest. If n is the number of hours she needs to work to meet her goal, which inequality models this situation?

a) $20 + n + 275 \geq 5{,}000$

b) $20n - 275 \geq 5{,}000$

c) $20n + 275 \geq 5{,}000$

d) $20n + 275 \leq 5{,}000$

Can be more than or equal to goal of $5000

Question 06

In the question above, how many hours does she have to work to meet her goal?

237 hours (whole number only)

more than 236.25

$20n + 275 \geq 5000$
$-275 \quad -275$
$20n \geq 4725$
$n \geq 236.25$

Question 07

A student wants to save at least $2,000 for college. The student already has $163 from birthday gift money. He plans to work at a store for $21.50 per hour to save the rest. How many hours does he have to work to meet his goal?

86 hours (whole number only)

more than 85.4...

$21.5n + 163 \geq 2000$
$-163 \quad -163$
$21.5n \geq 1837$
$n \geq 85.4...$

Question 08

Can be less than or equal to $100

A shopper wants to buy a new speaker and as many video games as she can at Target. She has $100 to spend. The speaker costs $27.75 and each game costs $17.50. How many games can she buy?

4 games

4 less than 4.12...

$17.5g + 27.75 \leq 100$
$-27.75 \quad -27.75$
$17.5g \leq 72.25$
$g \leq 4.12...$

Question 09

A shopper wants to buy a hot chocolate and as many muffins as he can at a bakery. He has $10 to spend. The hot chocolate costs $3.75 and each muffin costs $0.95. How many muffins can he buy?

6 muffins

less than 6.57...

$0.95m + 3.75 \leq 10$
$-3.75 \quad -3.75$
$0.95m \leq 6.25$
$m \leq 6.57...$

Question 10

A shopper wants to buy a new suit and as many matching neck ties as he can. He has $500 to spend. The suit costs $375 and each neck tie costs $35. How many neck ties can he buy?

3 ties

$35n + 375 \leq 500$
$-375 \quad -375$
$35n \leq 125$
$n \leq 3.57...$