Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Moving Straight Ahead***

**3.2 & 3.3**

***ACE Homework***

***Solving***

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_

**1.** Ms. Chang’s class decides to use the *Cool Tee’s* company to make their T-shirts.  
The following equation represents the relationship between cost *C* and the number  
of T-shirts *n*.

*C* = 2*n* + 20

**a.** The class wants to buy 25 T-shirts from *Cool Tee’s*. Describe how you  
use a **table** and a **graph** to find the cost of 25 T-shirts.

**Hint:** If you are unsure, try using a table

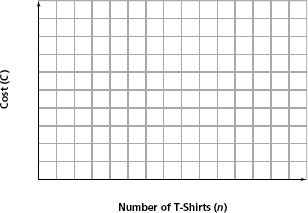
or a graph and then explain.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***n* (T-shirts)** | 0 | 1 | 5 | 10 | 15 | 20 | 25 |
| ***C* (cost)** | $20 |  |  |  |  |  |  |

**T-shirt Cost**

How can you use the **table?**

**T-shirt Cost**



How can you use the **graph?**

**b.** Suppose the class has $80 to spend on T-shirts. Describe how you can use  
a table and a graph to find the number of T-shirts the class can buy.

**Hint:** Refer to your graph  
and table from part (a).

How could you use the **table?**

How could you use the **graph?**

**c.** Taleah writes the following equation in her notebook:

*C* = 2(15) + 20

What information is Taleah looking for?

**d.** Keisha uses the **coordinates** (30, 80) to find information about the cost of  
the T-shirts. What information is she looking for?

*For problems 5-8,* ***write an equation*** *for the picture and find the number of gold coins in each pouch. Use an x to represent the number of gold coins in each pouch and a number to represent the number of coins on each side.*



**5.**

**6.**

**7.**

**8.**

***9.*** *For each equation in (a) – (d),* ***sketch a picture*** *using pouches and coins.*

*Then determine how many coins are in a pouch. Finally, check your answer.*

|  |  |
| --- | --- |
| **a)** 3x = 12 | **b)**  2x + 5 = 19 |
| **c)** 3x + 5 = 20 | **d)** 10 = 2x + 4 |

**10.** Gilberto’s grandfather gives him $5 for his birthday and then $0.50 for each math question he answers correctly on his math quizzes for the year.

**a.** Write an equation that represents the amount of money that Gilberto receives during the school year. Explain what the variables and numbers mean.

**b.** Use the equation to find the number of correct answer Gilberto needs to buy a new shirt that costs $25. Show your work.

**c.** Gilberto answered all 12 problems correctly on his first math quiz.

At least how much money will Gilberto receive from his grandfather?

Show your work.

**14.** Solve each equation for x. Check your answers.

**a.** 3x + 5 = 20 **b.** 3x – 5 = 20

**c.** 3x + 5 = –20 **d.** –3x + 5 = 20

**e.** –3x – 5 = –20 **f.** 5 – 3x = 20

**48.** World Connections long-distance phone company charges $50 per month plus 10 cents per minute for each call.

1. Write an equation for the total monthly cost *C* for *t* minutes of long-distance calls.
2. Dwayne makes 10½ hours of long-distance calls in a month.

How much is his bill for that month?

1. If Andrea receives a $75 long-distance bill for last month’s calls, how many minutes of long-distance calls did she make?