

1. Solve  $\frac{x}{3} - 12 = -4$  and check your answer:

2. What two numbers would make the absolute value equation true?

$$|6 + \underline{\quad}| = 3$$

3. Dan was looking for two integers that have a sum of  $-6$  and a product of  $9$ . She said  $-3$  and  $-4$ . Is she correct? Explain.

4. What is the mean of the following data set? How did you compute the mean? Write your steps out.

$-1, 15, -7, 8, -1, 3$

5.  $-17 + (25)$  has the same result as which of the following?

a.  $17 + 25$

b.  $-(17 + 25)$

c.  $17 + (-25)$

d.  $-[(-17) + (-25)]$

6. Write the expression that could be used to represent “take a number  $x$ , triple it, and then take that result away from  $18$ ”?

7. You borrow \$10.00 from your sister and then pay her back \$8.00. Then you borrow another \$5.00. What is the resulting balance? (*How much do you still owe her?*)

8. Select *all* values equivalent to  $\frac{-15}{-7}$

- a.  $-\frac{15}{7}$
- b.  $-2\frac{1}{7}$
- c.  $1\frac{2}{7}$
- d.  $2\frac{1}{7}$
- e.  $\frac{15}{7}$

9. What are the values of  $n$  that would make the following equations true?

a.  $(ny + 1) + (2y + 1) = (11y + 2)$

b.  $(4x + 5) - (nx + 6) = (7x - 1)$

c.  $(nz) + (nz + 17) = (12z + 17)$

10. Which expression below has the greatest value? What is your strategy?

- a.  $10 - 12$
- b.  $-10 - 12$
- c.  $10 - (-12)$
- d.  $-10 - (-12)$

11. What is the decimal equivalent of  $\frac{10}{8}$ ? How did you get your answer?

12. In a bag of trail mix, there are 14 grams of peanuts for every 4 grams of raisins. How many grams of peanuts are there for every 1 gram of raisins? (*Hint: find the unit rate!*)