

## Spiral Review Day (R)

### Step 1: Equations and Inequalities Review

1a. Write an equation for the perimeter of the rectangle below when its perimeter is equal to 66 units.

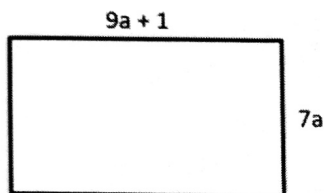
$$18a + 2 + 14a = 66$$

1b. Solve for the value of a.

$$32a + 2 = 66$$

$$32a = 64$$

$$a = 2$$



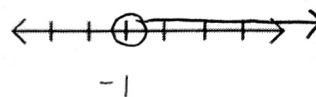
2. Solve for x. Then graph the solutions on the number line below.

$$-6(2x - 4) < 36$$

$$-12x + 24 < 36$$

$$-12x < 12$$

$$x > -1$$



3. Ryan already has \$50 but needs a total of at least \$250 for his trip. He gets paid \$12 per day for delivering papers. What is the least number of days he must work to have enough money for his trip?

Inequality:  $12d + 50 \geq 250$

Solution(s):  $d \geq 17$  days

4. This weekend Jana spent 65 minutes doing homework. This is 5 minutes fewer than twice the amount of time that she spent doing homework last weekend. What equation represents this situation if m represents the number of minutes she did homework last weekend?

A)  $65 - 5 = 2m$

B)  $5 - 2m = 65$

C)  $2m + 5 = 65$

D)  $2m - 5 = 65$

5. The cost of using Expert Internet Service is a one-time fee of \$25 plus a monthly fee of \$10. You spent a total of \$295 on this service.

a) Using m for the number of months, write an equation for this scenario.  $10m + 25 = 295$

b) How many months did you use this service?  $m = 27$  months

**Step 2: Did you score below 80% on the test? If yes, work on test corrections. If no, continue to Step 3.**

Test Correction Requirements:

- Must use a Test Corrections form
- Work must be shown ("No work, no credit")

-----Checkpoint-----

**Step 3: Mixed Review**

What is an equivalent expression for  $\frac{2}{3} - \frac{4}{5}$ ?

- A)  $\frac{2}{3} + \frac{4}{5}$
- B)  $\frac{2}{3} + (-\frac{4}{5})$
- C)  $-\frac{2}{3} + \frac{4}{5}$
- D)  $-\frac{2}{3} + (-\frac{4}{5})$

The cost of using Expert Internet Service is a one-time fee of \$25 plus a monthly fee of \$10. What is the total cost of using Expert Internet Service for 8 months?

- A) \$105
- B) \$133
- C) \$250
- D) \$280

Use the equation below to answer the question.

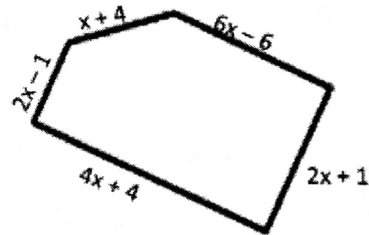
$$a + b = c$$

If  $a > 0$  and  $c < 0$ , what must be true about  $b$ ?

- A)  $b > 0$
- B)  $b < 0$
- C)  $b = 0$
- D)  $b = c$

If the perimeter of the shape below is 47 units, find the value of  $x$ .

- A) 2.07
- B) 47
- C) 3
- D) 3.27
- E)  $17x$



Solve the inequality.  $-0.3n \leq 5.4$

- A)  $n \leq -18$
- B)  $n \leq -1.8$
- C)  $n \geq -1.8$
- D)  $n \geq -18$

15% of the class earned a C on the test. If 9 students earned a C, what is the total number of students in the class?

Which answer option offers the correct equation and solution?

- A)  $0.15x = 9$       $x = 60$
- B)  $15(9) = x$       $x = 135$
- C)  $0.15(9) = x$       $x = 1.35$
- D)  $9x = 0.15$       $x = 0.02$

-----Checkpoint-----