Integrated Math I Summer Review Packet
2019 -2020

## WEEK – 2

NAME: _____

DUE: THE FIRST DAY OF SCHOOL

The problems in this packet are designed to help you review topics from previous mathematics courses that are essential to your success in Integrated Math II. **You are expected to bring this completed packet to class on the first day of school.** In addition, this packet will count as part of your first quarter grade. **Upon returning, you will be ASSESSED on the content of this packet**. All contents outlined in the packet are Integrated Math I objectives. Neatly **SHOW YOUR WORK** on a separate sheet of paper.

Edulastic

Q1: Determine the inequality represented by this graph on the number line.
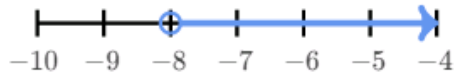
p is [a ▼]

Determine the inequality represented by this graph on the number line.

p is [b ▼]

a.
- ( ) greater than -8
- ( ) less than -8
- ( ) less than or equal to -8
- ( ) greater than or equal to -8

b.
- ( ) less than -5
- ( ) less than or equal to -5
- ( ) greater than -5
- ( ) greater than or equal to -5

Q2: Solve the following inequality.

$$9x - 2 > 43$$

Here, $x > $ [   ] .

Q3: Simplify the expression and combine like terms.

$$2\ (x+6)\ +\ 3x\ +\ 4 = \boxed{a \qquad\qquad \blacktriangledown}$$

a.

    ◯   5x+16

    ◯   6x+10

    ◯   4x+16

Q4: Which expression is equivalent to the given expression?
$$2(3a + 2b - 7)$$

A $5a + 4b - 5$

B $6a + 2b - 7$

C $6a + 4b - 7$

D $6a + 4b - 14$

Q5: Which expression(s) are equivalent to the given expression?
$$6x - 18y + 36$$

A $2(3x - 9y + 18)$

B $3(2x - 6y + 12)$

C $4(2x - 14y + 32)$

D $6(x - 3y + 36)$

E $9(6x - 2y + 4)$

Q6: McKenna was asked to write the following expression in standard form.

$3 - 5(3a + 6)$

When writing the expression in standard form, McKenna made a mistake.

$$3 - 5(3a + 6)$$

$$3 + (-5)(3a + 6) \quad \text{Step } 1$$

$$-2(3a + 6) \quad \text{Step } 2$$

$$-6a + (-12) \quad \text{Step } 3$$

$$-6a - 12 \quad \text{Step } 4$$

a. McKenna made her first mistake in [a ▾] .

b. The correct expression in standard form is [＿＿＿＿＿] .

a.
- ○ Step 1
- ○ Step 2
- ○ Step 3
- ○ Step 4

Q7: I ordered some books online for myself and friends.
Each book costs 13 and the store charges a flat rate for shipping of 20.

Write an expression for the cost of buying n books.

Answer: [＿＿＿＿＿＿]

Q8: Evan has a summer job to pick berries on a farm.
- He earns 2.00 every 15 minutes that he picks strawberries.
- He earns 2.40 for every 15 minutes that he picks blueberries.
- He picked strawberries for an hour and blueberries for 45 minutes.
How much money did Evan earn?

A 4.40

B 8.80

C 15.20

D 26.40

Q9: Solve $\frac{y}{2} + 22 = 38$ for y.

A 16

B 8

C 32

D 24

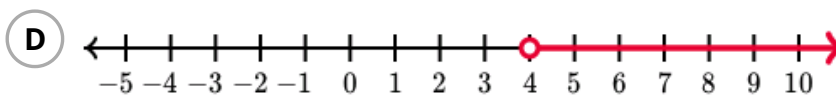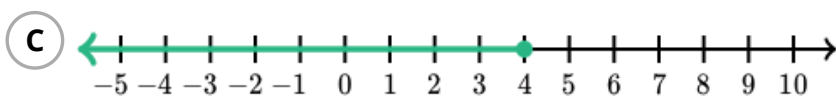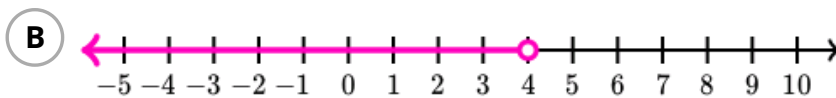
Q10: Part A
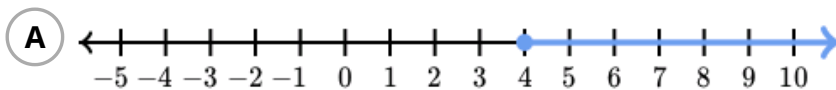
Find the solution set of the inequality.

$52 - 3x < -14$

Here, x ⬚ a ▼ ⬚ ⬚

Part B

Which graph represents the solution set of this inequality?

$1 + 2x < 9$

A

```
←+++++++++++|━━━━━━━━→
 −5 −4 −3 −2 −1  0  1  2  3  4  5  6  7  8  9 10
```

B

```
←━━━━━━━━━━━○+++++++→
 −5 −4 −3 −2 −1  0  1  2  3  4  5  6  7  8  9 10
```

C

```
←━━━━━━━━━━━◆+++++++→
 −5 −4 −3 −2 −1  0  1  2  3  4  5  6  7  8  9 10
```

D

```
←+++++++++++○━━━━━━━→
 −5 −4 −3 −2 −1  0  1  2  3  4  5  6  7  8  9 10
```

a.

⬚ ○ >
　○ <

Q11: A family of 4 is buying cell phones. Each phone costs x dollars if the family buys the super plan which costs $89 for each family member. The total cost for each family member to have a phone with the super plan is $1,952.

Part A

Which equation represents this situation?

A $4(x + 89) = 1,952$

B $(x + 89) + 4 = 1,952$

C $4x + 89 = 1,952$

D $4x(89) = 1,952$

Part B
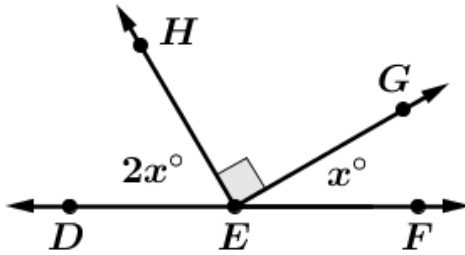What is the cost, in dollars, of each phone?

Each phone costs $\$$ ⬚ .

Q12: Which expression shows $56x + 40y - 48z$ written as a product of the greatest common factor and one other factor?

A $8(7x + 5y - 6z)$

B $8(7x + 5y + 6z)$

C $8x(7 + 5y - 6z)$

D $4(14x + 10y - 12z)$

Q13: a. In a complete sentence, describe the angle relationship in the diagram.

b. Find the value of x.

Q14: Simplify:

$$\tfrac{1}{2}\left(2a+4\right)$$

A $2a+4$

B $a+2$

C $2a+2$

D $a+4$

Q15: Anastasia went shopping for birthday gifts and bought three of the same board game. She also spent $\$9.75$ on birthday cards. Anastasia spent a total of $\$69.60$. What was the price of each board game?

The price of each board game was \$ [_____] .

Q16: Simplify the expression and combine like terms.

$$4\left(x-2\right)+2\left(x+1\right)\ =\ \boxed{}$$

Q17: Express the given statement in the form of expression.

5 **subtracted from three times any number.**

Use x to represent any number.

The expression to represent the above statement is [ ]

Q18: Ms. Garcia asked her students to write the following expression in standard form.

$$\frac{5}{6} + 4\left(\frac{3}{4}g - 6\right)$$

Hiromi wrote the following expression.

$$3g - 5\frac{1}{6}$$

a. Hiromi's expression [a ▾] equivalent to the given expression.

b. The given expression in standard form is [ ] . (If Hiromi's expression is correct, please retype it.)

a.
- ○ is
- ○ is not

Q19: Jordan's dog weighs p pounds. Emmett's dog weighs 25% more than Jordan's dog.
Which expressions represent the weight, in pounds, of Emmett's dog?
Select **each** correct answer.

A $0.25\,p$

B $1.25\,p$

C $p + 0.25$

D $p + 1.25$

E $p + 0.25p$