Day #10
IAR Practice TEST section 1
Non-calculator

Please take your time, double check everything, and then submit/turn in when finished. Please do the best you can (I know the format may not be perfect).

13 Questions

Today, you will take Unit 1 of the Grade 7 Mathematics Test. Unit 1 has two sections. In the first section, you may not use a calculator. In the second section you may use a calculator. **You will not be allowed to return to the first section of the test after you start the calculator section.** You must complete both the non-calculator and calculator sections of Unit 1 within the time allowed.

Read each question. Then, follow the directions to answer each question. If a question asks you to show or explain your work, you must do so to receive full credit. Enter your response in the box provided on your screen. Only responses entered in the response box will be scored.

If you do not know the answer to a question, you may bookmark it and go on to the next question. When you finish the first section, you may review your answers and any question you may have bookmarked in this section ONLY. Once you have reviewed your answers, continue to the calculator section by submitting the answers for the first section. Raise your hand if you need assistance continuing to the calculator section.

Scroll down for the questions! There are 13!!!

1.) Type your answer(s) here:

Which expressions are equivalent to $3\frac{1}{4} - \left(-\frac{5}{8}\right)$?

Select **all** that apply.

- A. $3\frac{1}{4} - \left(\frac{5}{8}\right)$
- B. $3\frac{1}{4} + \left(\frac{5}{8}\right)$
- C. $3\frac{1}{4} + \left(-\frac{5}{8}\right)$
- D. $3\frac{1}{4} + \left(+\frac{5}{8}\right)$
- E. $-3\frac{1}{4} + \left(-\frac{5}{8}\right)$
- F. $-3\frac{1}{4} + \left(+\frac{5}{8}\right)$

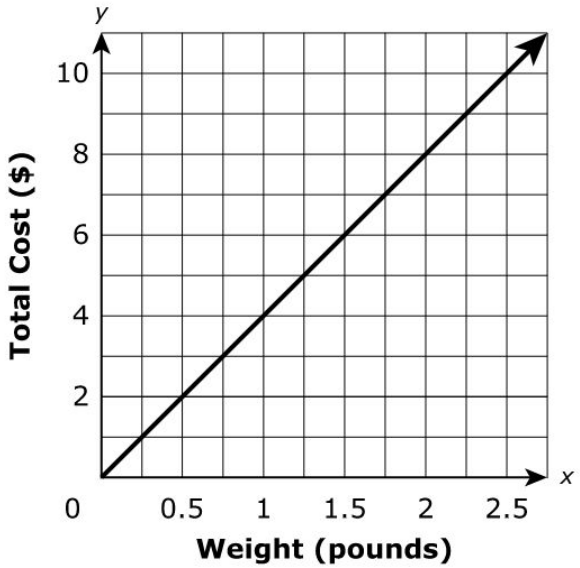
2.) Type your answer(s) here:

At the start of the month, the value of an investment was $\$48.45$. By the end of the month, the value of the investment changed by a loss of $\$13.80$.

What was the value, in dollars, of the investment at the end of the month?

3.) Type your answer(s) here:

This graph shows the relationship between the pounds of cheese bought at a deli and the total cost, in dollars, for the cheese.



Select **each** statement about the graph that is true.

Select **all** that apply.

- A. The point $(0, 0)$ shows the cost is \$0.00 for 0 pounds of cheese.
- B. The point $(0.25, 1)$ shows the cost is \$0.25 for 1 pound of cheese.
- C. The point $(0.5, 2)$ shows that 0.5 pound of cheese costs \$2.00.
- D. The point $(1, 4)$ shows the cost is \$4.00 for 1 pound of cheese.
- E. The point $(2, 8)$ shows that 8 pounds of cheese cost \$2.00.

4.) Type your answer(s) here:

Which expression is equivalent to $\frac{1}{4}(8-6x+12)$?

- A. $\frac{7}{2}x$
- B. $-\frac{13}{2}x$
- C. $-6x+14$
- D. $-\frac{3}{2}x+5$

5.) Type your answer(s) here:

In which situation could the quotient of $-24 \div 3$ be used to answer the question?

- A. The temperature of a substance decreased by 24°C per minute for 3 minutes. What was the overall change of the temperature of the substance?
- B. A football team lost 24 yards on one play, then gained 3 yards on the next play. How many total yards did the team gain on the two plays?
- C. Julia withdrew a total of $24 from her bank account over 3 days. She withdrew the same amount each day. By how much did the amount in her bank account change each day?
- D. A cookie jar contains 24 cookies. Each child receives 3 cookies. How many children are there?

6.) Type your answer(s) here:

A garden is 15 feet long by 5 feet wide. The length and width of the garden will each be increased by the same number of feet. This expression represents the perimeter of the larger garden:

$$(x + 15) + (x + 5) + (x + 15) + (x + 5)$$

Which expression is equivalent to the expression for the perimeter of the larger garden?

Select **all** that apply.

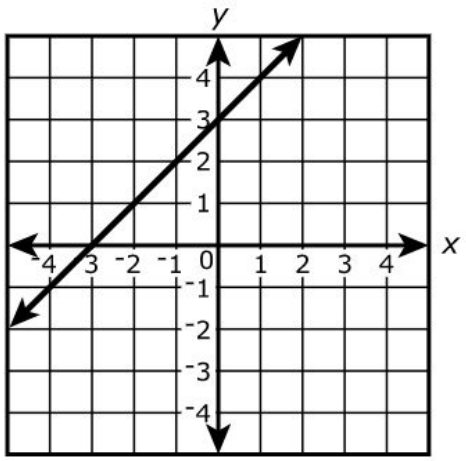
- ☐ A. $4x + 40$
- ☐ B. $2(2x + 20)$
- ☐ C. $2\,(x + 15)(x + 5)$
- ☐ D. $4\,(x + 15)(x + 5)$
- ☐ E. $2(x + 15) + 2(x + 5)$

7.) Type your answer(s) here:

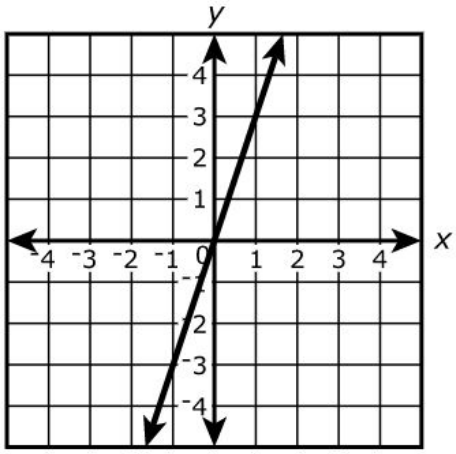
Which relationships have the same constant of proportionality between y and x as in the equation $y = \frac{1}{3}x$? .

Select **each** correct answer.

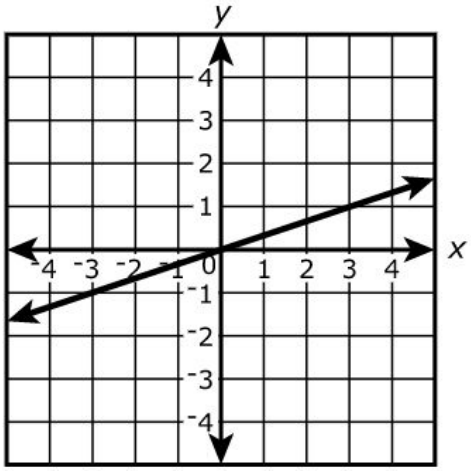
A.



B.



C.



D.

x	−1.5	0	1.6	9.7
y	−4.5	0	4.8	29.1

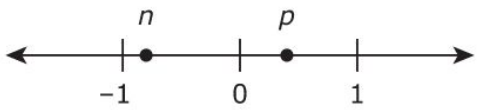
E.

x	−5.4	−2.7	1.5	2.4
y	−1.8	−0.9	0.5	0.8

Circle your answer(s) here: **Box 1** - choose ***n-p*** or ***n+p*** or ***p-n***
Box 2 - choose ***n-p*** or ***n+p*** or ***p-n***

8.) Type your answer(s) here:

Two numbers, n and p are plotted on the number line shown.



The numbers $n - p$, $n + p$, and $p - n$ will be plotted on the number line.

Select an expression from each drop-down menu to make this statement true.

The number with the least value is Choose... , and the number with the greatest value is Choose... .

9.) Type your answer(s) here:

Jessica rented 1 video game and 3 movies for a total of $11.50.

- The video game cost $4.75 to rent.
- The movies cost the same amount each to rent.

What amount, in dollars, did Jessica pay to rent each movie?

10.) Type your answer(s) here:

Which equation has a constant of proportionality equal to 4?

- A. $4y = 4x$
- B. $4y = 12x$
- C. $3y = 4x$
- D. $3y = 12x$

11.) Type your answer(s) here:

Which expressions are equivalent to $\frac{-5}{19}$?

Select **each** correct answer.

- [ ] A. $\frac{5}{19}$
- [ ] B. $-\frac{5}{19}$
- [ ] C. $\frac{-5}{-19}$
- [ ] D. $\frac{5}{-19}$
- [ ] E. $-\left(\frac{5}{19}\right)$
- [ ] F. $-\left(-\frac{5}{19}\right)$

12.) Type your answer(s) here: x = and y =

Two equations are shown.

Equation 1: $\frac{2}{3}\left(x-6\right)=6$

Equation 2: $\frac{2}{3}y-6=6$

Solve each equation. Then, enter a number in each box to make this statement true.

The value of x is [ ], and the value of y is [ ].

13.) Type your answer(s) here:

The numbers of parts produced by three different machines are shown in the table.

Numbers of Machine Parts

Minutes	Machine Q	Machine R	Machine S
1	9	8	6
3	18	24	18
9	72	72	52

Only one of the machines produces parts at a constant rate. Write an equation that can be used to represent *y*, the number of parts produced in *x* minutes, for that machine.

Please submit your answers - do the best you can!