7.EE Interim Practice Questions

Question 01

Write the value of t so that the expression $3(5 + k)$ is equivalent to $3(k + t)$.

Question 02

Select all expressions that are equivalent to $5x + 4x - 7 - 2x - 3$.

a) $9x - 2x - 10$

b) $9x - 2x - 4$

c) $7x - 4$

d) $7x - 10$

Question 03

Fill in the blank.

$$0.47 + \frac{3}{10} = \frac{\square}{100} + \frac{3}{10}$$

Question 04

Select all expressions equivalent to $-15x + 30$.

a) $10(-5x + 20)$

b) $15(-x + 2)$

c) $-5(-3x + 6)$

d) $-3(5x - 10)$

Question 05

Select the expression equivalent to $(-3x + 7.2y) - (-5x + 2.4y)$

a) $-8x + 9.6y$

b) $2x + 4.8y$

c) $-8x + 4.8y$

d) $2x + 9.6y$

Question 06

Select all expressions that are equivalent to $3x + (x + 5) + 2x$

a) $6x + 5$

b) $5x + 5$

c) $3x + 5 + 2x$

d) $4x + 5 + 2x$

Question 07

You have a total of $200 to spend. You buy headphones for $45. You want to spend the rest of your money on DVDs that cost $20 each (tax included).

What is the maximum number of DVDs you can buy with the money you have left?

Question 08

A student is rewriting the expression $0.25(-8 + 20x - 24)$. Her steps are below.

Step 1	$0.25(-8 + 20x - 24)$
Step 2	$0.25(20x - 32)$
Step 3	$5x - 32$

Which statement identifies and explains the first mistake the student makes?

a) Her first mistake was in Step 2. When simplifying $-8 - 24$ the answer is 16, not -32.

b) Her first mistake was in Step 2. When simplifying $-8 - 24$ the answer is 32, not -32.

c) Her first mistake was in Step 3. She should have added 0.25 to the first term in the parenthesis, not multiplied 0.25 to the first term in the parenthesis.

d) Her first mistake was in Step 3. She should have multiplied 0.25 to both terms in the parenthesis, not just the first term.

Question 09

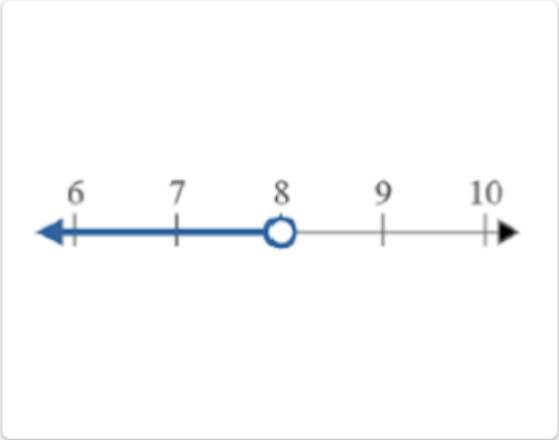
Fill in the blank.

$$0.2 + \frac{88}{100} = \frac{\square}{100} + \frac{88}{100}$$

Question 10

Select the number line that shows the solution to the following inequality:

$$2x - 6 \geq 10$$



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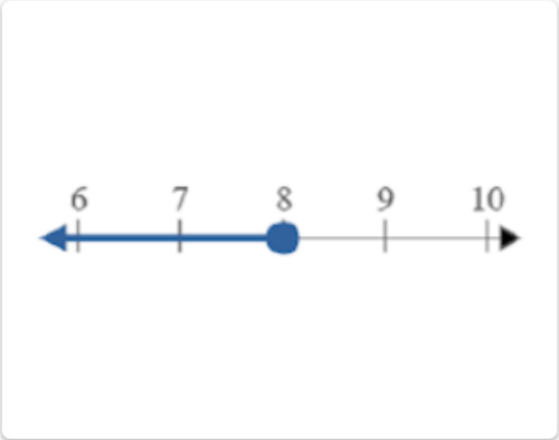

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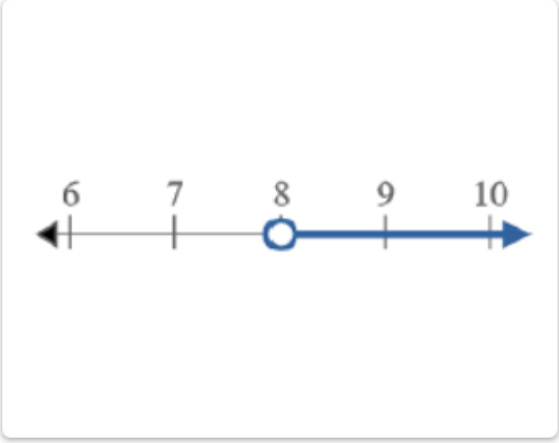

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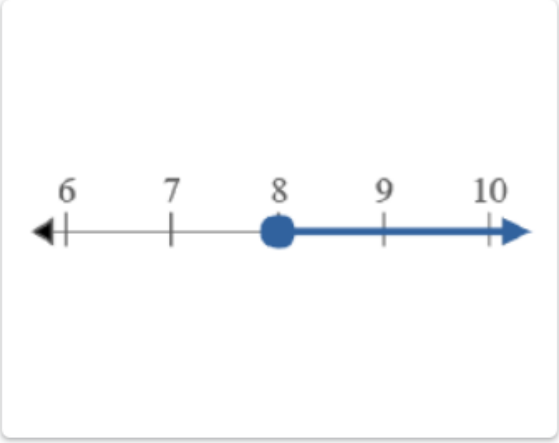


Option 4

Question 11

Your family is driving from Seattle to San Francisco and you record data of your progress as follows:

Time (Hours)	Distance (Miles)
3	180
4	240
7	420

Part A.

At this rate, how many miles will you have traveled after 10 hours driving?

Part B.

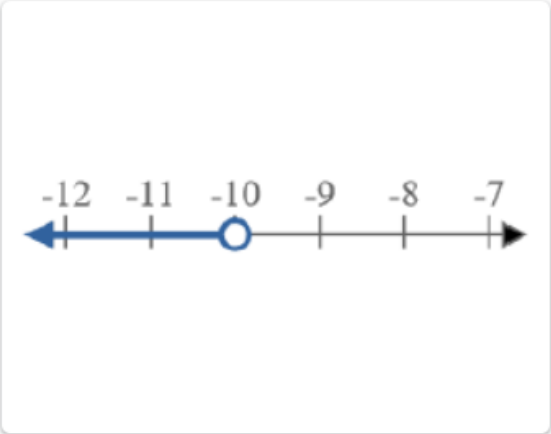
Write an equation that represents the relationship between distance and time for your trip. Use d for distance in miles and use t for time in hours.

Hint: Use the form $d = \_\_t$

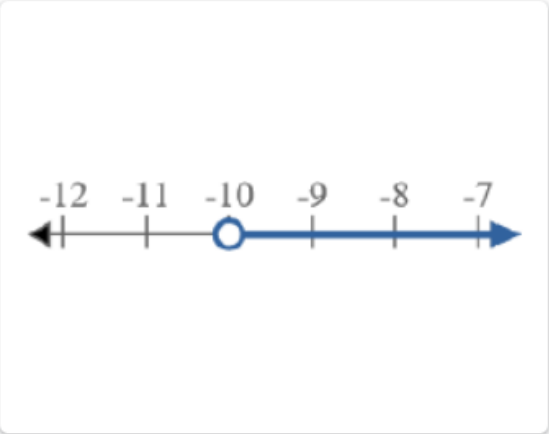
Question 12

Select the number line that shows the solution to the following inequality:

$$-4x + 5 > 45$$



Option 1



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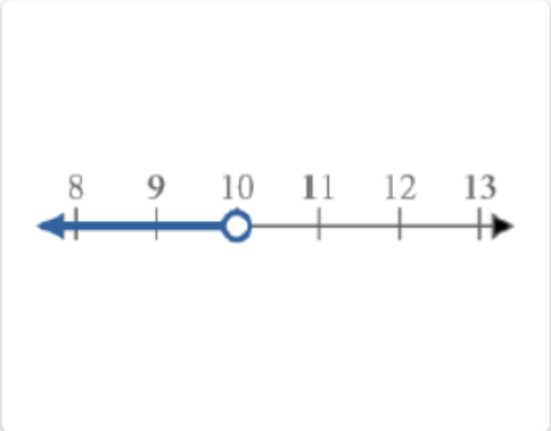

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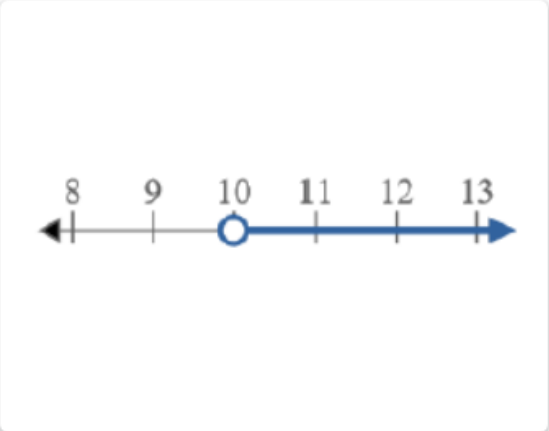


Option 4

Question 13

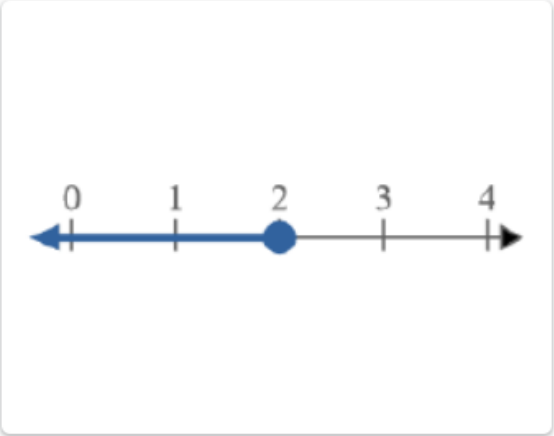
A high school student used to charge $40 for 5 hours of babysitting. The student then increased her fee by 25%.

How much does she now charge, in dollars, for each hour of babysitting?

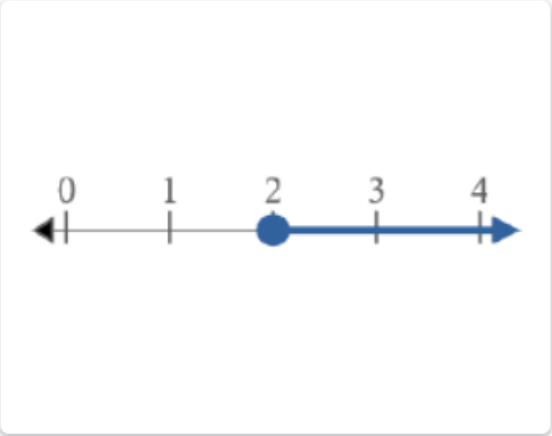
Question 14

Select the number line that shows the solution to the following inequality:

$$-4x - 2 \leq -10$$



Option 1



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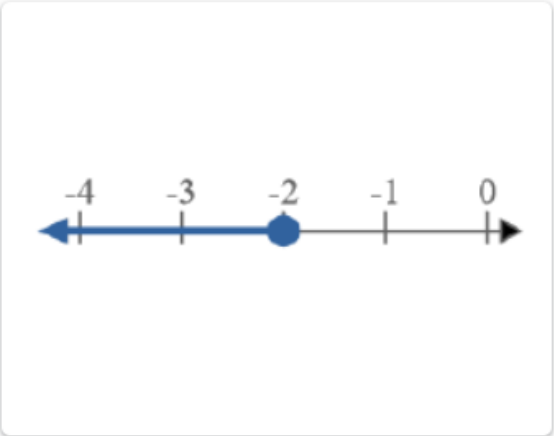

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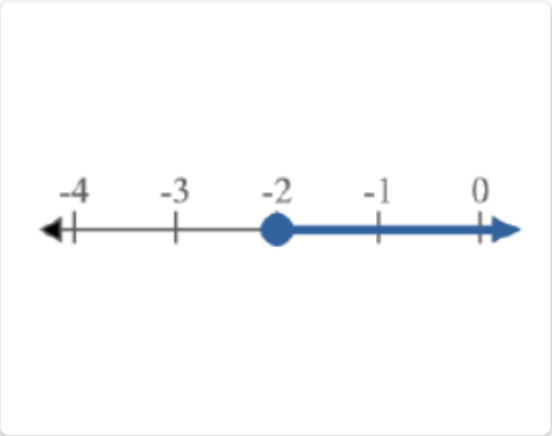
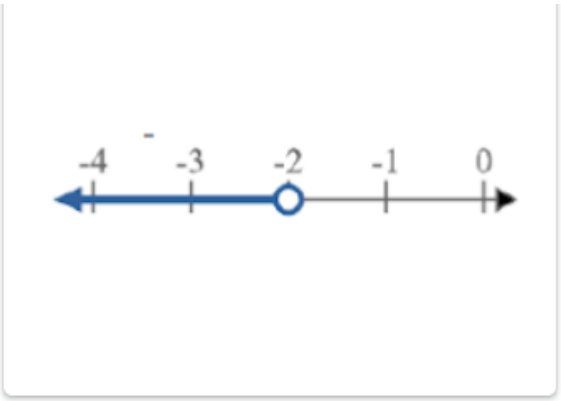


Option 4

Question 15

Select the number line that shows the solution to the following inequality:

$$5x + 15 < 5$$



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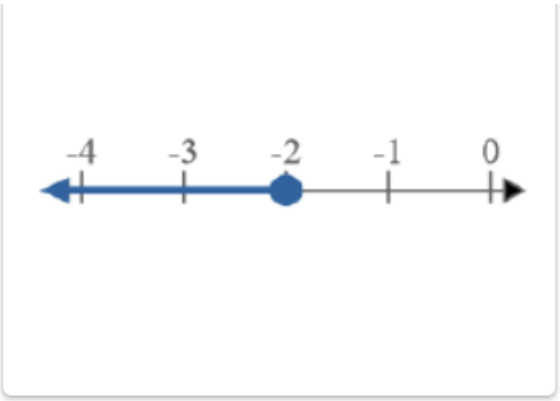

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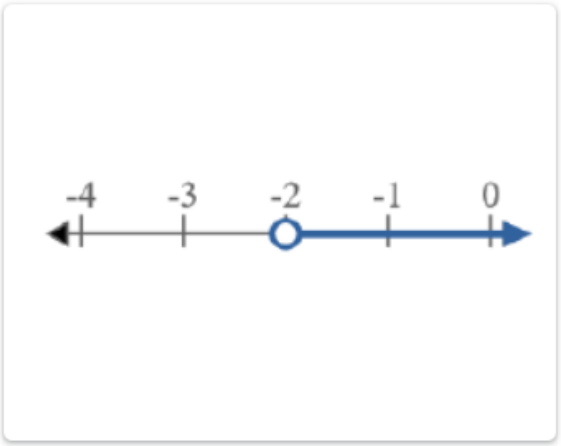

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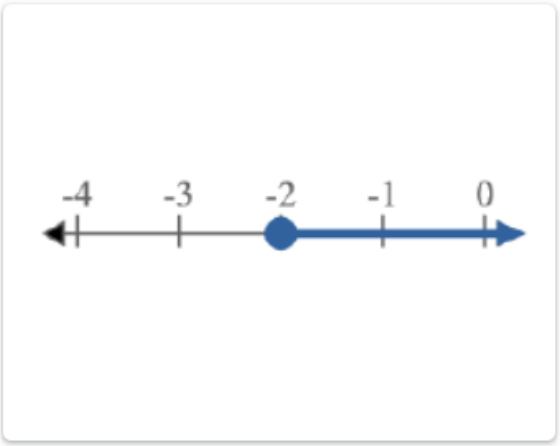

Option 4