

**State Exam Review 3 - Show all work and circle the correct answer.**

- 1) Mike took a taxi from his home to the airport. The taxi driver charged an initial fee of \$6 plus \$3 per mile. The total fare was \$24, not including the tip. How many miles did Mike travel by taxi on this ride?

A 2  
B 6  
C 8  
D 10

- 2) What is the value of the expression?

$$\frac{8}{15} \div (-0.35)$$

A  $-\frac{75}{14}$   
B  $-\frac{32}{21}$   
C  $-\frac{21}{32}$   
D  $-\frac{14}{75}$

- 3) Three friends own a landscaping business. The number of hours each friend spent on the same project is shown in the table below.

**HOURS WORKED ON  
LANDSCAPING PROJECT**

Name	Hours Worked
Edgar	$17\frac{1}{4}$
Kelly	$18\frac{1}{4}$
Shawn	$14\frac{1}{2}$

In total, they earned \$850 for the job. They put 15% of this amount into a joint savings account for future expenses. They then divided the rest proportionally based on the number of hours each worked. How much money did Shawn receive?

A \$209.53  
B \$240.83  
C \$283.48  
D \$295.11

4)

A clothing store used the sign shown below to advertise a discount on shirts.

<p><b>DISCOUNT</b></p> <p>Buy Two Shirts</p> <p>Get 50% Off Third Shirt</p>
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Ky wants to buy three shirts, which were originally priced \$49.96 each. The store will discount the price of the third shirt and then apply a 7.1% tax to the total cost of all three shirts. Including the tax, what will be the mean cost of each shirt?

- A \$41.99
- B \$42.70
- C \$44.59
- D \$45.18

5)

What is the solution of the equation below?

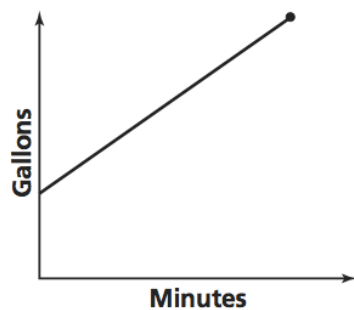
$$4(x + 5) = x + 8$$

**Show your work.**

Check to see if your answer is correct.

**Show your work.**

- 6) On the lines below, describe a situation that could be represented by the graph shown below.



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On the lines below, explain the reason the graph does not pass through the origin in the situation you described.

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- 7) Simplify the expression below.

$$(3x^2 + 4x - 3) - (2x - 1)$$

**Show your work.**