7th Grade Pre-Algebra STAAR
Practice Week 1
TEKS 7.3B Mastery Machine Day 1

Score: __________/5 ______%  Mastery?: Yes__________ : No__________

1) The 17 students on the math team want to raise $483.62 to buy practice books. They have already raised $218.25. If each student raises the same amount, how much more money must each student raise?

   A  $15.61
   B  $12.84
   C  $28.45
   D  $41.29

2) A scientist had a bottle that contained 56.6 mL of a solution. She used 3.2 mL of the solution for an experiment. Then she poured half the solution remaining in the bottle into a beaker. Finally she poured 6 mL of the solution remaining in the bottle into a test tube. How many milliliters of solution remained in the bottle?

   A  23.7 mL
   B  21.5 mL
   C  19.1 mL
   D  20.7 mL
3) At a restaurant, 42 people had breakfast on Saturday morning.

- \(\frac{1}{7}\) of the people ate eggs only.
- \(\frac{2}{3}\) of the people ate both pancakes and eggs.
- The remaining people ate pancakes only.

Which fraction represents the number of people who ate pancakes only?

A \(\frac{4}{21}\)

B \(\frac{8}{21}\)

C \(\frac{17}{21}\)

D \(\frac{17}{42}\)

4) Mr. Stein is purchasing 2.25 pounds of meat that costs $2.60 per pound. How much change should Mr. Stein receive if he gives the cashier $20.00?

F $6.30

G $13.70

H $14.95

J $2.52
5) Wendy had 35 tickets for games at a carnival. She used \( \frac{1}{5} \) of the tickets to play the ball-toss game. She then used \( \frac{1}{2} \) of the remaining tickets to play the ring-toss game, in which she won 5 more tickets. How many tickets did Wendy have after playing these games?

A  7  
B  19  
C  14  
D  28
1) The temperature in Anchorage, Alaska was 4°F at 2:00 PM. The temperature dropped 2.5 degrees per hour until 9:00 PM. The temperature dropped another 9 degrees by midnight. How much colder was it at midnight than at 2:00 PM?

F. 17.5° colder
G. 26.5° colder
H. 22.5° colder
J. 18.5° colder

2) Jack bought a used car for $4,555. He made a down payment of $1,500 for the car, and he will pay the remaining balance in 10 equal payments. How much will Jack still owe on the car after he makes seven payments?

Record your answer and fill in the bubbles. Be sure to use the correct place value.
3) The Alamodome in San Antonio, Texas can seat 77,000 people during a music concert. The table shows the number of seats sold.

<table>
<thead>
<tr>
<th>Ticket Company</th>
<th>Seats Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>23,650</td>
</tr>
<tr>
<td>Company B</td>
<td>31,902</td>
</tr>
<tr>
<td>Company C</td>
<td>11,783</td>
</tr>
</tbody>
</table>

How many seats are still available for the concert?

F. 9,655 seats
G. 9,765 seats
H. 10,335 seats
J. 10,664 seats

4) Bethany is making 6 cakes for a charity bake sale. Each cake requires the ingredients shown below.

- \[2 \frac{3}{4}\] cups flour
- \[1 \frac{1}{2}\] cups sugar
- 3 teaspoons baking powder
- \[\frac{1}{3}\] cup oil

Based on the ingredients shown, how many cups of flour and oil will she need to make 6 cakes?

A. \(12 \frac{3}{4}\) cups flour; 2 cups oil
B. 13 cups flour; \(2 \frac{2}{3}\) cups oil
C. \(13 \frac{1}{2}\) cups flour; \(2 \frac{2}{3}\) cups oil
D. \(13 \frac{3}{2}\) cups flour; 2 cups oil
5) 10. On Monday, Stock QT started the day with a value of $2.37 per share. The table shows the change in value over a 5-day time span.

<table>
<thead>
<tr>
<th>DAY</th>
<th>CHANGE IN VALUE ($)</th>
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<tbody>
<tr>
<td>Monday</td>
<td>+1.05</td>
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<tr>
<td>Tuesday</td>
<td>-0.98</td>
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<tr>
<td>Wednesday</td>
<td>-1.15</td>
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<tr>
<td>Thursday</td>
<td>+0.74</td>
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<tr>
<td>Friday</td>
<td>-0.72</td>
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What was the value per share of Stock QT at the end of the day on Friday?

Record your answer and fill in the bubbles. Be sure to use the correct place value.
Name: _______________________________ HR: __________________ Date:__________________

TEKS 7.3.B Mastery Machine Day 3

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<th>Score: ________/5 ______ %</th>
<th>Mastery?: Yes________ : No________</th>
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1) Mario reached a high score of 15,898 points playing a video game. He attempted to reach this high score again the next day, but scored 4,239 points less than he needed. What was Mario’s score on his second attempt?

A 11,559  
B 11,659  
C 11,661  
D 20,137

2) The temperature in the Arctic Circle at 9:00 a.m. was -28 °F. By 6:00 p.m. on the same day, the temperature had decreased by 16 degrees. What was the temperature after the decrease?

A 12 °F  
B 8 °F  
C -12 °F  
D -44 °F

3) Alex had $693.27 in her bank account. She withdrew money from the account to pay $123.54 for her electric bill and $98.66 for groceries. How much money was left in Alex's account after she made these withdrawals?

A $471.07  
B $569.73  
C $594.61  
D $791.93
4) Each member of a cross-country team runs 6.2 miles each day at practice. The team has 5 seventh-grade members. What is the total number of miles the 5 seventh-grade team members will run in 18 practices?

A  111.6
B  552
C  555
D  558

5) Philip had $674.31 in his student lunch account at the beginning of the school year. By the end of the school year, he had spent $782.75 on lunches. What was the balance in Philip’s lunch account at the end of the school year?

Record your answer in the boxes. Then fill in the bubbles. Be sure to use the correct place value.
### TEKS 7.3B Mastery Machine

**Day 4**

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<th>Score: __________/5 __________%</th>
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1) **Maisy jogged 6 laps around a 0.25-mile track on Monday and 7 laps on Tuesday. How many miles did she jog on Monday and Tuesday combined? (7.3B, RC2, RS)**

   Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

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2) **At a flower store, roses are $4.99 per dozen and carnations are $3.68 per dozen. How much would 3 dozen roses and 2 \( \frac{1}{2} \) dozen carnations cost, not including tax? (7.3B, RC2, RS)**

   - **F** $15.89
   - **G** $24.17
   - **H** $22.33
   - **J** $14.97

3) **A cook had a bottle that contained 56.6 mL of an oil. She used 3.2 mL of the oil for a recipe. Then she spilled half the oil remaining in the bottle on the counter. Finally she poured 6 mL of the oil remaining in the bottle into another pan. How many milliliters of oil remained in the bottle? (7.3B, RC2, RS)**

   - **A** 23.7 mL
   - **B** 21.5 mL
   - **C** 19.1 mL
   - **D** 20.7 mL
4) Terry bought a sweater for $24 before tax. He had a coupon for $\frac{1}{4}$ off. The sales tax rate was 0.06. How much did Terry pay for the sweater, including tax? \((7.3B, RC2, RS)\)

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

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<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>0</td>
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5) It took Bailey $\frac{2}{3}$ of an hour to complete her daily chores. It took Bailey $\frac{1}{2}$ of the amount of time to do her homework as her daily chores. How many more minutes did it take Bethany to complete her daily chores than her homework? \((7.3B, RC2, RS)\)

A 30  
B 10  
C 70  
D 40
1) Frank and his family drove 6 hours every day during a road trip. Which graph best represents \( y \), the total number of hours driven in \( x \) days?

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<thead>
<tr>
<th>Score: __________/5 __________%</th>
<th>Mastery?: Yes__________ : [□ No]__________</th>
</tr>
</thead>
</table>

- **A**
  - Total Number of Hours Driven
  - Number of Days

- **B**
  - Total Number of Hours Driven
  - Number of Days

- **C**
  - Total Number of Hours Driven
  - Number of Days

- **D**
  - Total Number of Hours Driven
  - Number of Days
2) 1. Nancy drove her golf cart across the yard at a constant rate of speed. Based on the equation \( d = rt \), where

- \( d \) represents the distance traveled,
- \( r \) represents the rate of speed,
- and \( t \) represents the number of hours,

which of the following equations represents the distance Nancy traveled on her golf cart if she drove at a constant speed of 12 miles per hour?

A. \( 12 = rt \)
B. \( d = 12r \)
C. \( 12d = 12t \)
D. \( d = 12t \)

3) 3. A rancher feeds his cattle the same amount of food each day. The graph below represents this relationship.

![Feeding Cattle Graph]

Based on the graph, which answer choice defines the constant rate in this situation?

A. \( \frac{1}{2} \) bags per day
B. 3 bags per day
C. \( \frac{2}{3} \) bag per day
D. 1 bag per day
4. A restaurant uses cartons of eggs every morning. The number of cartons used are shown below.

<table>
<thead>
<tr>
<th>30 minutes</th>
<th>60 minutes</th>
<th>90 minutes</th>
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<tbody>
<tr>
<td><img src="image" alt="" /></td>
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</table>

Based on the display, which of the following best describes the rate of egg use?

F. The restaurant uses 12 eggs per hour.

G. The restaurant uses 6 eggs per hour.

H. The restaurant uses 1 egg per hour.

J. The restaurant uses 18 eggs per hour.
5. Tommy has 3 dogs. Last month, he bought

- 5 pounds of dog food for $7.95,
- 8 pounds of dog food for $12.72,
- and 15 pounds of dog food for $23.85.

What is the constant cost of the dog food per pound?

Record your answer and fill in the bubbles. Be sure to use the correct place value.