

Chapter 1 Test, Form 1A

For Exercises 1 and 2, express each fraction or mixed number as a decimal. Use bar notation if needed. **TEKS 7.2**

1. $\frac{4}{5}$ _____

2. $1\frac{8}{9}$ _____

3. What is 0.35 as a fraction in simplest form? **TEKS 7.2** _____

4. What is the least common denominator of $\frac{11}{12}$ and $\frac{1}{8}$? **TEKS 7.3(A)** _____

5. What is the least common denominator of $\frac{3}{4}$ and $\frac{7}{10}$? **TEKS 7.3(A)** _____

Write the symbol that makes each sentence true. **TEKS 7.2**

6. $3\frac{13}{28}$ $3\frac{17}{30}$ _____

7. $-\frac{7}{12}$ $-\frac{5}{9}$ _____

8. Write a number that belongs to the set of rational numbers but does not belong to the sets of whole numbers and integers. **TEKS 7.2** _____

Determine the value of each expression. Write in simplest form. **TEKS 7.3(A)**

9. $\frac{1}{6} + \left(-\frac{7}{9}\right)$ _____

10. $11\frac{5}{7} + 8\frac{1}{7}$ _____

11. $\frac{3}{12} \times \left(-\frac{4}{21}\right)$ _____

12. $-\frac{3}{16} \times \frac{4}{9}$ _____

13. $\frac{3}{5} - \frac{1}{5}$ _____

14. $3\frac{5}{9} - 2\frac{1}{3}$ _____

15. $\frac{5}{6} \div 2\frac{1}{6}$ _____

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Chapter 2 Test, Form 1A

1. Calculate the unit rate if there are 1,760 Calories in 8 servings.
- TEKS 7.4(B)**

2. A cheetah can run 70 miles per hour. What is this speed in feet per hour?
- TEKS 7.4(E)**

3. What is the unit price of the 32-ounce yogurt?

TEKS 7.4(E)

Yogurt Prices	
Size (oz)	Cost (\$)
6	0.89
8	1.04
10	1.69
32	4.79

4. Which size of yogurt shown in the table has the lowest unit price?
- TEKS 7.4(B), 7.4(D)**

5. Kevin drove
- $22\frac{1}{2}$
- miles in
- $\frac{1}{3}$
- hour. What was his average speed in miles per hour?

TEKS 7.4(A)

6. The table shows the costs for ordering different numbers of pizzas. What is the value of
- x
- if the cost is proportional to the number of pizzas ordered?
- TEKS 7.4(D)**

Pizzas Ordered	2	3	4	5
Cost (\$)	19.98	29.97	39.96	x

7. Determine whether the relationship shown in the table below is a direct variation. If so, state the constant of proportionality.
- TEKS 7.4(C)**

Time, (h), x	1	2	3	4
Cost (\$), y	25	50	75	100

Solve each proportion. **TEKS 7.4(D)**

8. $\frac{118}{13} = \frac{59}{z}$ _____

9. $\frac{19.2}{24} = \frac{2.4}{v}$ _____

10. The recipe for an omelet says that 5 eggs make 2 servings. How many eggs are required to make 8 servings?
- TEKS 7.4(D)**

11. Tyler went to pick fresh berries at a farm. He picked 3 quarts of blueberries and paid \$15.60. How much would it cost to pick 4 quarts of blueberries?
- TEKS 7.4(D)**

Chapter 3 Test, Form 1ADetermine each number. **TEKS 7.4(D)**

1. What is 138% of 250? _____
2. What percent of 80 is 8? _____

Estimate. **TEKS 7.4(D)**

3. 49% of 15 _____
4. $\frac{3}{4}$ % of 387 _____

Write an equation for each problem. Then solve. Round to the nearest tenth. **TEKS 7.4(D)**

5. What number is 74% of 58? _____
6. 89% of what number is 14? _____

Determine each percent of change. Round to the nearest whole percent. State whether the percent of change is an *increase* or a *decrease*. **TEKS 7.4(D)**

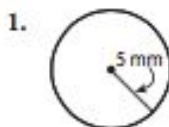
7. 100 to 150 _____
8. \$300 to \$200 _____
9. 30 to 90 _____

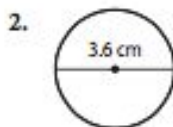
Determine the total cost or selling price to the nearest cent. **TEKS 7.4(D)**

10. \$20 haircut; 15% tip _____
11. \$35 lamp; 5% tax _____
12. \$50 tool set; 10% markup _____
13. \$65 video game; 25% discount _____

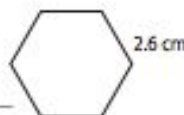
Chapter 4 Test, Form 1A

Determine the circumference of each circle. Use 3.14 for π . Round to the nearest tenth if necessary. **TEKS** 7.5(B), 7.9(B)

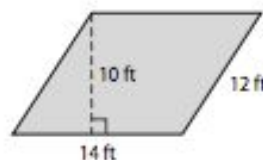




3. The regular hexagon shown is enlarged so that its sides are 5 times longer. What effect does this have on the perimeter? Justify your answer. **TEKS** 7.5(A), 7.5(C)



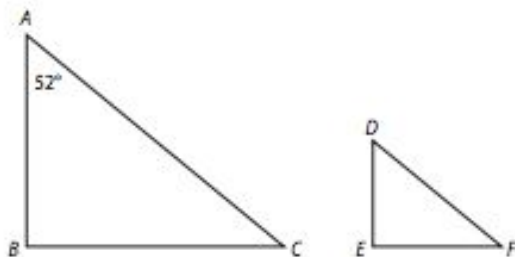
For Exercises 4 and 5, refer to the parallelogram at the right. Justify your answers. **TEKS** 7.5(A), 7.5(C)



4. Suppose the base and height are each multiplied by $\frac{1}{2}$. What effect would this have on the area?

5. Suppose the side lengths are multiplied by 2. Describe the change in the perimeter.

6. The ratio of the sides of similar triangles ABC and DEF is 3:1. What is the measure of angle EDF ? **TEKS** 7.5(A)



7. On a map, 1 centimeter represents 4 kilometers. The distance between the library and the post office on the map is 2.2 centimeters. Rico rode his bicycle from the library to the post office and back. How far did he travel? **TEKS** 7.5(C)

Chapter 7 Test, Form 1ADetermine the solution of each equation from the list given. **TEKS 7.11(B)**

1. $2x - 5 = 9$; 7, 8, 9 _____

2. $\frac{1}{2} + 7y = -3$; $-\frac{5}{2}$, $-\frac{3}{2}$, $-\frac{1}{2}$ _____

Solve each equation. **TEKS Preparation for 7.10(A)**

3. $9 + n = -2$ _____

4. $14 = y - 10$ _____

5. $5 = x + 3$ _____

6. $t - 26 = -21$ _____

7. $84 = 7d$ _____

8. $6z = 12$ _____

9. $\frac{x}{4} = -1$ _____

10. $0.3a = 6$ _____

11. $\frac{2}{3}x = 4$ _____

12. $\frac{1}{2}x = \frac{5}{6}$ _____

Solve each two-step equation. **TEKS 7.11(A)**

13. $-8x + 3 = -29$ _____

14. $\frac{5}{6}(x + 4) = 15$ _____

15. $3x + 1 = -11$ _____

16. $-2 + \frac{4}{5}x = 6$ _____

17. Three times Geoff's age plus 3 is Myrka's age. Myrka is 48. What is Geoff's age?

TEKS 7.11(A) _____18. In a basketball game, Trina scored 6 points less than twice the number of points Rachel scored. Trina scored 12 points. How many points did Rachel score? **TEKS 7.11(A)**

Chapter 7 Test, Form 1A (continued)

19. Write a real-world problem that can be represented by the equation $15x + 125 = 245$. Then solve the problem. **TEKS 7.10(C)**

20. It costs Guido \$0.20 per minute to forward voicemail messages as texts to his cell phone. He already spent \$4 in forwarding messages this month. If he can spend \$10 this month on forwarding messages, write and solve an inequality to find how many more minutes he has left. Interpret the solution. **TEKS 7.11(A)**

Solve each inequality. **TEKS Preparation for 7.10(A)**

21. $x + 6 < 5$ _____

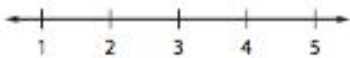
22. $-5b > 20$ _____

23. $\frac{2}{3}a + 6 > 0$ _____

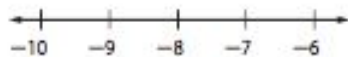
24. $\frac{y}{-2} \leq 3$ _____

For Exercises 25–28, solve each inequality. Graph the solution on a number line. **TEKS 7.10(B)**

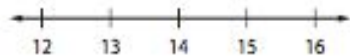
25. $b - 4 \geq -1$ _____



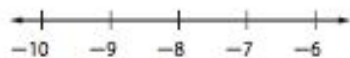
26. $\frac{p}{-1} > 7$ _____



27. $y + 6 > 20$ _____



28. $5k \geq -45$ _____



29. Stephanie makes \$6.60 an hour plus tips working at a restaurant. On a particular day, she worked 8 hours and made \$78.80. Write and solve an equation to determine the amount she made in tips. Use a problem-solving model to solve. **TEKS 7.10(A), 7.11(A)**
