

CHAPTER

2

Chapter Test

Form A

Select the best answer.

1. Solve $x - 7 = 25$.

A 18

B 32

2. Solve $54 = a + 22$.

A 32

B 76

3. Which equation represents the relationship "3 more than a number is 7"?

A $n + 7 = 3$ B $n + 3 = 7$ C $3n = 7$ D $3 - n = 7$

4. Solve $-8m = 48$.

A -6

B 6

C 40

D 56

5. Solve $\frac{h}{7} = 6$.

A -42

C 13

B -13

D 42

6. The product of 9 and n is -27. What is the value of n ?

A -243

B -3

7. Solve $2(z + 1) = 16$.

A 4

C 7.5

B 7

D 9

8. Solve $\frac{d}{3} - 9 = -12$.

A -9

C 6

B -3

D 15

9. Solve $a + 6 = 3a - 8$.

A -1

B 2

C 7

D 14

10. Yoga Fun charges a \$63 starting fee plus \$12 per class. Yoga For All charges no starting fee and \$15 per class. For how many classes will the cost be the same at both places?

A 3

B 5

C 21

D 27

11. Solve $6(x - 1) = 6x - 1$.

A no solution

B all real numbers

12. Solve $V = IR$ for R .

A $R = \frac{V}{I}$ B $R = \frac{I}{V}$

13. Solve $y + w = x$ for y .

A $y = w - x$ B $y = x - w$

14. Solve $|x| = 7$.

A 7

B -7, 7

15. Solve $|x + 8| = 13$.

A 5

B -21

C no solution

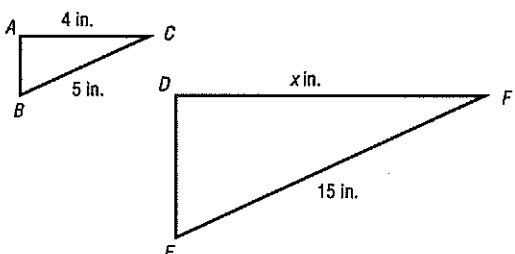
D 5, -21

CHAPTER

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Chapter Test

Form A continued

16. Nina can braid 48 inches of rope in 1 hour. What is her speed in feet per hour?
- A 0.8 ft/h C 576 ft/h
B 4 ft/h D 2880 ft/h
17. Solve $\frac{4}{s} = \frac{-2}{9}$.
- A -4.5 B -18
18. The ratio of boys to girls in Art class is 1:2. There are 12 girls in the class. How many boys are there?
- A 6 B 24
19. Every dimension of a 2 cm by 3 cm rectangle is tripled to form a similar rectangle. Which is equal to the ratio of the perimeters?
- A the ratio of the corresponding sides
B the cube of the ratio of the corresponding sides
20. Kris is 2 meters tall and casts a shadow 4 meters long. At the same time, a tree casts a shadow 10 meters long. How tall is the tree?
- A 5 m
B 20 m
21. $\triangle ABC \sim \triangle DEF$. Find x .
- 
- A $\frac{4}{3}$ C 8
B 7 D 12
22. 10 is 20% of what number?
- A 2 C 50
B 30 D 200
23. What is 30% of 15?
- A 0.5 C 4.5
B 2 D 50
24. A sales clerk earns a 3% commission on each sale. What is the commission earned on a sale of \$4450?
- A \$133.50
B \$148.33
25. The check for Kelli's breakfast is \$5.74. Which is the best estimate of a 20% tip?
- A \$0.50 C \$1.00
B \$0.60 D \$1.20
26. Find the percent decrease from 44 to 22.
- A 50%
B 100%
27. What is the result when 50 is increased by 10%?
- A 55
B 60
28. The owner of a shop bought a scarf at the wholesale price of \$8 and marked it up by 300%. What is the selling price?
- A \$19 C \$32
B \$24 D \$38
29. Cass bought a stereo for \$180. She received a 15% employee discount. How much did she save?
- A \$12 C \$165
B \$27 D \$153

CHAPTER

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Chapter Test

Form B

Select the best answer.

1. Solve $x - 74 = 146$.

- A -220 C 72
B -72 D 220

2. Solve $19.5 = a + 2.4$.

- F -21.9 H 17.1
G -17.1 J 21.9

3. Which equation represents the relationship "3 less than a number is -6"?

- A $n - 3 = -6$ C $3 + n = -6$
B $3 - n = -6$ D $n - 6 = 3$

4. Solve $-11m = -132$.

- F -121 H 12
G -12 J 121

5. Solve $-\frac{3}{7}h = 6$.

- A -14 C $2\frac{4}{7}$
B $-2\frac{4}{7}$ D 14

6. The quotient of n and -4 is 8. What is the value of n ?

- F -32 H 2
G -2 J 32

7. Solve $6(z + 3) - 9 = 27$.

- A 0 C 5.5
B 3 D 10.5

8. Solve $\frac{d}{14} - \frac{1}{2} = \frac{1}{14}$.

- F -8 H 6
G -6 J 8

9. Solve $-a + 7 = 2a - 8$.

- A -3 C 5
B $-\frac{1}{3}$ D 15

10. Tia's car needs repairs. Honest Harry will charge \$70 per hour plus \$130 for the part. Lucky Lou will charge \$80 per hour plus \$40 for the part. How long is the job if the two costs are the same?

- F $1\frac{2}{3}h$ H 17 h
G 9 h J 20 h

11. Solve $7(x - 2) = 7x + 14$.

- A no solution C 2
B 0 D all real numbers

12. Solve $A = \frac{1}{2}bh$ for h .

- F $h = \frac{A}{2b}$
G $h = \frac{b}{2A}$
H $h = \frac{2A}{b}$
J $h = A - \frac{1}{2}b$

13. Solve $xy + 7 = n$ for y .

- A $y = xn - 7$
B $y = \frac{n-7}{x}$
C $y = x(n-7)$
D $y = \frac{1}{x}(n+7)$

14. Solve $|2x - 9| = 3$.

- F 3 H -3, -6
G 3, 6 J -3, 6

15. Solve $|x + 3| + 6 = 4$.

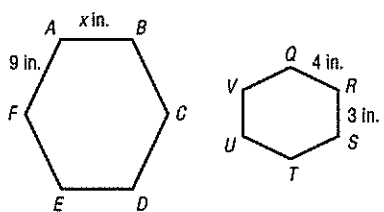
- A -1 C no solution
B -5 D -1, -5

CHAPTER

2

Chapter Test

Form B continued

16. A chef can bake 15 pies in one hour. What is the rate in pies per minute?
F 0.25 pies/min H 1.6 pies/min
G 0.625 pies/min J 4 pies/min
17. Solve $\frac{4}{s-3} = \frac{-2}{5}$.
A -11.5 C 8.5
B -7 D 13
18. The ratio of girls to boys in French class is 5:4. There are 12 boys in the class. How many girls are there?
F 7 H 15
G 10 J 17
19. A rectangle has a length of 5 cm and a width of 3 cm. Every dimension is doubled to form a second rectangle. What is the ratio of the perimeters of the two rectangles?
A 1:2 C 1:4
B 1:3 D 1:8
20. Kris is 1.5 meters tall and casts a shadow 4 meters long. At the same time, a statue casts a shadow 12 meters long. What is the height of the statue?
F 4.5 m H 24 m
G 10.6 m J 32 m
21. $ABCDEF \sim RSTUVQ$. Find x .
- 
- A 2.25 in. C 10 in.
B 6.75 in. D 12 in.
22. 16 is 20% of what number?
F 0.8 H 80
G 12.5 J 125
23. What is 200% of 11.5?
A 2.3 C 23
B 5.75 D 57.5
24. A salesman earns a 3% commission on the sale of each car. What is the commission earned on a car that sells for \$18,600?
F \$558 H \$5580
G \$620 J \$6200
25. A restaurant check is \$24.87. Which is the best estimate of a 15% tip?
A \$1.25 C \$3.75
B \$2.50 D \$5.00
26. Find the percent decrease from 40 to 25.
F 37.5% H 62.5%
G 60% J 160%
27. What is the result when 70 is increased by 80%?
A 14 C 126
B 56 D 150
28. Juanita sold a scarf for \$24. Her wholesale cost was \$10. What was the percent markup? Round to the nearest tenth, if needed.
F 41.7% H 140%
G 58.3% J 336%
29. Before using his coupon, Ben owed \$87 for a tuxedo rental. After he used the coupon, he owed \$69.60. What percent discount did Ben receive?
A 20% C 75%
B 25% D 80%

CHAPTER

2

Chapter Test

Form C

Select the best answer.

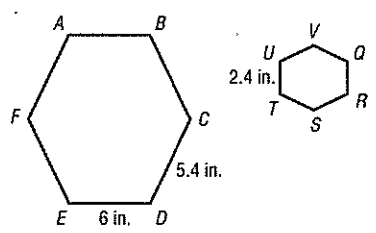
- Solve $x - 68 = -121$.
A -189 C 53
B -53 D 189
- Solve $34.8 = a + 5.8$.
F 29 H 39.8
G 29.8 J 40.6
- A printer holds 500 sheets of paper. After printing it held 210 sheets. Which equation can be used to find how many sheets were printed?
A $s - 500 = 210$ C $210 - 500 = s$
B $210 + 500 = s$ D $500 - s = 210$
- Solve $-13m = -156$.
F -13 H 12
G -12 J 13
- Solve $-\frac{3}{8}h = 9$.
A -24 C 9.375
B -3.375 D 72
- The quotient of n and -0.5 is 13. What is the value of n ?
F -26 H 6.5
G -6.5 J 26
- Solve $7(z + 2) - 3z = 44$.
A 5.625 C 10.5
B 7.5 D 14.5
- Solve $\frac{3d}{4} - \frac{1}{2} = 7$.
F $5\frac{5}{8}$ H $8\frac{2}{3}$
G 8 J 10
- Solve $-(a - 9) = 3a + 17$.
A -8 C -2
B -4 D 6.5
- A printing company will charge \$6 plus \$0.07 per page. Another company will charge \$24 plus \$0.04 per page for the same project. For how many pages will the costs be the same regardless of which company is used?
F 330 H 600
G 400 J 1000
- Solve $-10(x - 1) = 10 - 10x$.
A no solution
B -1
C 0
D all real numbers
- Solve $A = \frac{1}{2}(b + c)h$ for c .
F $c = \frac{h}{2A} - b$
G $c = 2Ah - b$
H $c = \frac{2A}{h} - b$
J $c = 2h(A - b)$
- Solve $\frac{x}{y} + 9 = n$ for y .
A $y = xn - 9$
B $y = \frac{x}{n - 9}$
C $y = x(n - 9)$
D $y = \frac{n - 9}{x}$
- Solve $|x - 11| - 5 = -5$.
F -1, 1 H no solution
G 1 J 11
- Solve $2|x + 3| + 12 = 8$.
A -1 C no solution
B -2 D -1, -2

CHAPTER

2

Chapter Test

Form C continued

16. Kevin ran at a rate of 13 km/h. Convert his speed to meters per minute.
 F ≈ 0.2 m/min H ≈ 217 m/min
 G ≈ 3.6 m/min J $\approx 13,000$ m/min
17. Solve $\frac{1}{x-6} = \frac{3}{12x}$.
 A -2 C $-\frac{6}{5}$
 B $-\frac{3}{2}$ D 10
18. There are 30 singers in a show. The ratio of singers to dancers is 5:6. How many dancers are there?
 F 16 H 36
 G 30 J 55
19. The area of a rectangle was 15 cm^2 . Every dimension was multiplied by a scale factor and the new area was 3.75 cm^2 . What was the scale factor?
 A 0.5 C 4
 B 2 D 8
20. Jack is 1.75 m tall and casts a shadow 2.25 m long. At the same time, a statue casts a shadow 9 m long. What is the height of the statue?
 F 4 m H 7 m
 G 5.75 m J 11.6 m
21. $ABCDEF \sim QRSTUV$. Find the length of \overline{ST} .
- 
- A 2.16 in. C 2.67 in.
 B 2.5 in. D 2.9 in.
22. Nineteen is 40% of what number?
 F 7.6 H 475
 G 47.5 J 760
23. What is 200% of 25.5?
 A 0.51 C 51
 B 5.1 D 510
24. A salesman earns a 2.5% commission on the sale of each car. What was the selling price of a car if he earned \$420.60 in commission by selling it?
 F \$10,094.40 H \$16,824
 G \$10,515 J \$17,244.60
25. A meal costs \$50.30. Which is the best estimate of the final cost with 4% sales tax and 15% tip?
 A \$55.50 C \$61.50
 B \$59.50 D \$69.00
26. Find the percent decrease from 9 to 6.3.
 F 2.7% H 43%
 G 30% J 70%
27. What is the result when 5 is increased by $\frac{1}{2}\%$?
 A 5.025 C 5.25
 B 5.05 D 5.5
28. Juanita sold a shawl for \$40. Her wholesale cost was \$12.80. What was the percent markup?
 F 32% H 212.5%
 G 68% J 312.5%
29. Before using his coupon, Jule owed \$86 for a pair of jeans. After he used the coupon, he owed \$60.20. What percent discount did Jule receive?
 A 25% C 70%
 B 30% D 75%

CHAPTER

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Chapter Test

Form A

Solve each equation.

1. $x - 18 = 10$

2. $29 = a + 5$

3. Write an equation to represent the relationship "a number decreased by 12 is equal to 9." Then solve the equation.
-
- _____
-
- _____

Solve each equation.

4. $54 = 6m$

5. $\frac{1}{2}t = -8$

6. Write an equation to represent the relationship "the product of 7 and a number is 28." Then solve the equation.
-
- _____
-
- _____

Solve each equation.

7. $4(z - 1) + 1 = 21$

8. $1 = \frac{d}{10} - 12$

9. A car detailing company charges \$30 plus \$18 per hour. Another company charges \$25 plus \$20 per hour. How long is a job that costs the same no matter which company is used?
-
- _____

Solve each equation.

10. $12a - 15 = 8a + 1$

11. $3(x + 1) - 1 = 3x + 2$

12. Solve $D = \frac{M}{V}$ for M .

13. Solve $x + 6y = 12$ for y .

14. A train travels 120 miles in one hour. What is its speed in miles per minute?
-
- _____

15. What is the solution to $|x| = 13$?

16. What is the solution to $|x - 5| = 15$?

CHAPTER

2

Chapter Test

Form A continued

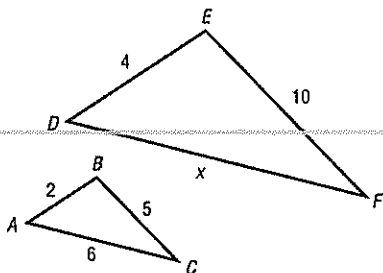
17. Solve $\frac{s}{10} = \frac{1}{2}$.

18. The ratio of the sale price of a textbook to the original price is 1:3. The original price is \$81. What is the sale price?

19. A rectangle has a length of 5 cm and a width of 4 cm. Every dimension is tripled to form a similar rectangle. What is the ratio of the perimeters of the two rectangles?

20. Shayla is 5 feet tall and casts a shadow 2 feet long. At the same time, a nearby lamppost casts a shadow 8 feet long. Write and solve a proportion to find the height of the lamppost.

21. Find the value of
- x
- in the diagram.
-
- $\triangle ABC \sim \triangle DEF$



22. Six is 10% of what number?

23. What is 300% of 12?

24. A telemarketer earns a 2% commission on each sale. Find the commission earned on sales of \$1400.

25. Estimate a 20% tip on a check for \$34.30.

26. Find the percent change from 72 to 18. Then tell whether it is a percent increase or decrease.

27. Find the result when 80 is decreased by 95%.

28. Antonio bought a hat at the wholesale cost of \$7. He marked it up by 100% and sold it. What was his selling price?

29. Alicia bought a prom dress for \$120. She had a coupon for 25% off of her purchase. What was the final price of the dress?

CHAPTER

2

Chapter Test

Form B

Solve each equation.

1. $x - 48 = 110$

2. $8 = a + 5.5$

3. Write an equation to represent the relationship "a number decreased by 11 is equal to
- -18
- ." Then solve the equation.
-
- _____
-
- _____

Solve each equation.

4. $63 = -9m$

5. $-\frac{3}{2}t = -9$

6. Write an equation to represent the relationship "the product of a number and negative 5 is 30." Then solve the equation.
-
- _____
-
- _____

Solve each equation.

7. $32 = 12 + 4(z - 1)$

8. $\frac{3}{5} = \frac{3}{10}d - 12$

9. A landscaping company charges \$100 plus \$15 per hour. Another company charges \$75 plus \$17 per hour. How long is a job that costs the same no matter which company is used?
-
- _____

Solve each equation.

10. $12a - 11 = 9a - 1$

11. $5(x + 2) - 7 = 5x + 3$

12. Solve $D = \frac{M}{V}$ for V .

13. Solve $-8x + 4y = 28$ for y .

14. A boat travels 36 miles in one hour. What is its speed in miles per minute?
-
- _____

15. What is the solution to $|4x + 4| = 12$?

16. What is the solution to $|x - 7| + 9 = 4$?

CHAPTER

2

Chapter Test

Form B continued

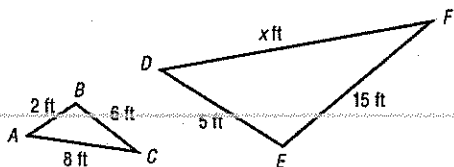
17. Solve $\frac{s+1}{10} = \frac{3}{-2}$.

18. The ratio of lemon juice to water in lemonade is 1:5. If 15 cups of water are used to make a pitcher of lemonade, how many cups of lemon juice are needed?

19. A rectangle has a length of 5 cm and a width of 4 cm. Every dimension is tripled to form a second rectangle. What is the ratio of the areas of the two rectangles?

20. Nathan is 6 feet tall and casts a shadow 2.5 feet long. At the same time, a lamppost casts a shadow 10 feet long. Write and solve a proportion to find the height of the lamppost.

21. Find the value of
- x
- in the diagram.
-
- $\triangle ABC \sim \triangle DEF$



22. Fifteen is 2% of what number?

23. What is 500% of
- $7\frac{1}{2}$
- ?

24. A realtor earns a 5% commission on the sale of each house. Find the commission earned on a house that sells for \$275,000.

25. Estimate the tip on a \$38.74 check using a tip rate of 20%.

26. Find the percent change from 60 to 78. Then tell whether it is a percent increase or decrease.

27. Find the result when 40 is decreased by 90%.

28. Antonio sold a hat for \$18. His wholesale cost was \$8. What was the percent markup?

29. Alicia bought a prom dress that originally cost \$110. After she used a coupon, she spent \$82.50 on the dress. What percent discount did she receive?

Chapter Test

Form C

Solve each equation.

1. $x - 39 = -105$

2. $11.5 = a + 4.5$

3. Write an equation to represent the relationship "a number decreased by negative 2 is equal to 21." Then solve the equation.
-
- _____
-
- _____

Solve each equation.

4. $\frac{m}{4} = -7$

5. $-4.8t = 9.6$

6. Write an equation to represent the relationship "the product of a number and
- -2.5
- is
- 60
- ." Then solve the equation.
-
- _____
-
- _____

Solve each equation.

7. $9(z - 1) + 2z + 16 = 62$

8. $\frac{7}{5} = \frac{d}{10} - \frac{3d}{2}$

9. A printing company charges \$42 plus \$0.05 per page. Another company just charges \$0.08 per page. How many pages are in an order that costs the same regardless of which company is used?
-
- _____

Solve each equation.

10. $10a - 35 = -8a + 1$

11. $5(x + 1) = 5(x + 5) - 15$

12. Solve $S = \frac{n}{2}(a + b)$ for b .

13. Solve $0.30x + 6y = 300$ for x .

14. A boat travels 66 miles in 2 hours. What is its rate in feet per minute?
-
- _____

15. What is the solution to $3|x - 12| + 7 = 7$?

16. What is the solution to $2|x + 3| - 4 = -6$?

Chapter Test

Form C continued

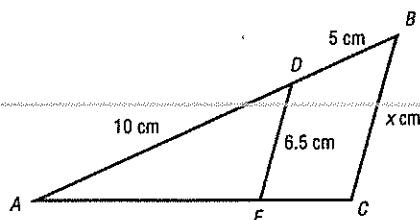
17. Solve $\frac{3}{-s+1} = \frac{6}{s+4}$.

18. The ratio of students to faculty members in a high school is 23:5. If there are 80 faculty members, how many students are there?
- _____

19. A triangle has an area of 40 square centimeters. Its dimensions are multiplied by a scale factor, forming a new triangle with an area of 640 square centimeters. What was the scale factor?
- _____

20. A tree casts a shadow 8.5 ft long at the same time that a nearby 3-foot-tall pole casts a shadow 3.75 feet long. Write and solve a proportion to find the height of the tree.
- _____

21. Find the value of x in the diagram.
 $\triangle ABC \sim \triangle ADE$.



22. Sixteen is 1.6% of what number?
- _____

23. What is 500% of 10.5?
- _____

24. A realtor earns a 3.25% commission on the sale of each house. How much did a house sell for if the realtor earned \$10,566.40?
- _____

25. Estimate the tip on a \$31.77 check using a tip rate of 15%.
- _____

26. Find the percent change from 0.5 to 3. Tell whether it is a percent increase or decrease.
- _____

27. Find the result when 130 is decreased by 15%.
- _____

28. Antonio sold skis for \$220. His wholesale cost was \$165. What was the percent markup?
- _____

29. Ali bought a suitcase that originally cost \$145. After she used a coupon, she spent \$116 on the suitcase. What percent discount did she receive?
- _____

- | | |
|-------|-------|
| 35. A | 36. J |
| 37. B | 38. G |
| 39. D | 40. H |
| 41. C | 42. G |

CHAPTER 2

Section Quiz: Lessons 2-1 to 2-6

- | | |
|-------|-------|
| 1. A | 2. G |
| 3. D | 4. H |
| 5. D | 6. J |
| 7. B | 8. F |
| 9. B | 10. H |
| 11. C | 12. G |
| 13. C | 14. G |
| 15. D | |

Section Quiz: Lessons 2-7 to 2-11

- | | |
|-------|-------|
| 1. C | 2. F |
| 3. D | 4. J |
| 5. B | 6. H |
| 7. D | 8. H |
| 9. B | 10. H |
| 11. D | 12. H |
| 13. C | |

Chapter 2 Test Form A

- | | |
|-------|-------|
| 1. B | 2. A |
| 3. B | 4. A |
| 5. D | 6. B |
| 7. B | 8. A |
| 9. C | 10. C |
| 11. A | 12. A |
| 13. B | 14. B |
| 15. D | 16. B |
| 17. B | 18. A |
| 19. A | 20. A |
| 21. D | 22. C |
| 23. C | 24. A |
| 25. D | 26. A |
| 27. A | 28. C |
| 29. B | |

Chapter 2 Test Form B

- | | |
|-------|-------|
| 1. D | 2. H |
| 3. A | 4. H |
| 5. A | 6. F |
| 7. B | 8. J |
| 9. C | 10. G |
| 11. A | 12. H |
| 13. B | 14. G |
| 15. D | 16. F |
| 17. B | 18. H |
| 19. A | 20. F |
| 21. B | 22. H |
| 23. C | 24. F |
| 25. C | 26. F |
| 27. C | 28. H |
| 29. A | |

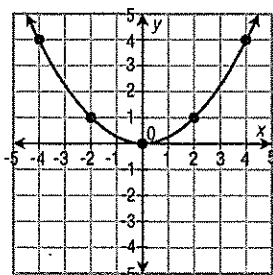
Chapter 2 Test Form C

- | | |
|-------|-------|
| 1. B | 2. F |
| 3. D | 4. H |
| 5. A | 6. G |
| 7. B | 8. J |
| 9. C | 10. H |
| 11. D | 12. H |
| 13. B | 14. J |
| 15. C | 16. H |
| 17. A | 18. H |
| 19. A | 20. H |
| 21. A | 22. G |
| 23. C | 24. H |
| 25. B | 26. G |
| 27. A | 28. H |
| 29. B | |

Chapter 2 Test Form A

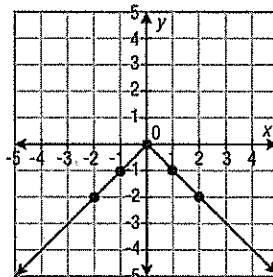
- | | |
|-----------------------------------|---------------------|
| 1. $x = 28$ | 2. $a = 24$ |
| 3. $n - 12 = 9; n = 21$ | 4. $m = 9$ |
| 5. $t = -16$ | 6. $7n = 28; n = 4$ |
| 7. $z = 6$ | 8. $d = 130$ |
| 9. $2.5h$ | 10. $a = 4$ |
| 11. $x = \text{all real numbers}$ | |

28. $(-4, 4), (-2, 1), (0, 0), (2, 1), (4, 4)$;
U-shaped



Chapter 1 Test Form C

1. $8 - m$
2. " k divided by 10" or "the quotient of k and 10"
3. 1.5
4. 0
5. -2.4
6. $\frac{7}{15}$
7. -7
8. 8
9. -3.125
10. 87.5 mi
11. 64
12. $\frac{49}{169}$
13. -1.2
14. rational, repeating decimal
15. whole, integer, rational, terminating decimal
16. 4.7 ft
17. 4
18. 2
19. -1
20. $\sqrt{\frac{-s}{-15}}$
21. $16 - |-4x|$
22. 87.9 in^3
23. 5
24. $3.1x - 24$
25. $-6x - 4.5y$
26. $(0, -4)$
27. Quadrant III
28. $(-2, -2), (-1, -1), (0, 0), (1, -1), (2, -2)$; V-shaped



Chapter 1 Performance Assessment

1. $(6, 12), (7, 10), (10, 10), (7, 6), (10, 6), (11, 12), (7, 8), (10, 8), (12, 10)$
2. **Rule 1:** $(12, 12), (13, 10), (16, 10), (13, 6), (16, 6), (17, 12), (13, 8), (16, 8), (18, 10)$
Rule 2: $(3, 12), (4, 10), (7, 10), (4, 6), (7, 6), (8, 12), (4, 8), (7, 8), (9, 10)$
Rule 3: $(6, 17), (7, 15), (10, 15), (7, 11), (10, 11), (11, 17), (7, 13), (10, 13), (12, 15)$
Rule 4: $(6, 10), (7, 8), (10, 8), (7, 4), (10, 4), (11, 10), (7, 6), (10, 6), (12, 8)$
3. **Rule 1:** moved 6 units to the right
Rule 2: moved 3 units to the left
Rule 3: moved 5 units up
Rule 4: moved 2 units down
4. a. $(x, y + 10)$
b. $(x - 8, y)$
c. $(x + 4, y - 7)$

Chapter 1 Cumulative Test

- | | |
|-------|-------|
| 1. A | 2. H |
| 3. A | 4. H |
| 5. D | 6. J |
| 7. B | 8. F |
| 9. B | 10. H |
| 11. C | 12. G |
| 13. C | 14. G |
| 15. C | 16. J |
| 17. C | 18. F |
| 19. D | 20. H |
| 21. C | 22. J |
| 23. B | 24. J |
| 25. A | 26. H |
| 27. A | 28. G |
| 29. B | 30. J |
| 31. C | 32. G |
| 33. A | 34. J |

12. $M = DV$ 13. $y = 2 - \frac{x}{6}$
 14. 2 mi/min 15. 13, -13
 16. -10, 20 17. $s = 5$
 18. \$27 19. 3
 20. $\frac{5}{2} = \frac{x}{8}$; 20 ft 21. 12
 22. 60 23. 36
 24. \$28 25. \$6.80
 26. 75% decrease 27. 4
 28. \$14 29. \$90

Chapter 2 Test Form B

1. $x = 158$ 2. $a = 2.5$
 3. $n - 11 = -18$; $n = -7$ 4. $m = -7$
 5. $t = 6$ 6. $-5n = 30$; $n = -6$
 7. $z = 6$ 8. $d = 42$
 9. 12.5 h 10. $a = 3\frac{1}{3}$
 11. all real numbers 12. $V = \frac{M}{D}$
 13. $y = 2x + 7$ 14. 0.6 mi/min
 15. -4, 2 16. no solution
 17. $s = -16$ 18. 3 cups
 19. 1:9 20. $\frac{6}{h} = \frac{2.5}{10}$; 24 ft
 21. $x = 20$ 22. 750
 23. $37\frac{1}{2}$ 24. \$13,750
 25. about \$7.80 26. 30% increase
 27. 4 28. 125%
 29. 25%

Chapter 2 Test Form C

1. $x = -66$ 2. $a = 7$
 3. $n - (-2) = 21$; $n = 19$ 4. $m = -28$
 5. $t = -2$
 6. $-2.5n = 60$; $n = -24$ 7. $z = 5$
 8. $d = -1$ 9. 1400
 10. $a = 2$ 11. no solution

12. $b = \frac{2S}{n} - a$ 13. $x = 1000 - 20y$
 14. 2904 ft/min 15. 12
 16. no solution 17. $s = -\frac{2}{3}$
 18. 368 students 19. 4
 20. $\frac{3}{3.75} = \frac{c}{8.5}$; $x = 6.8$ ft
 21. 9.75 cm 22. 1000
 23. 52.5 24. \$325,120
 25. \$4.80 26. 500% increase
 27. 110.5 28. $33\frac{1}{3}\%$
 29. 20%

Chapter 2 Performance Assessment

1. 7.25 2. 7.25; 2
 3. 1.30 4. 1.30; 2; 2.60
 5. \$2.60 is an underestimate. 15% of \$17.67 is actually \$2.65.
 6. Since tax is 2.9% a good multiplier would be 5. Her tip would come to $5 \times 0.20 = \$1.00$ which would be an underestimate of the \$1.20 that an exact 15% tip would be.
 7. 3 would be the best multiplier because it would give them a 21% tip. They would estimate \$8.70 which would be an overestimate. The exact tip would be \$8.26.

Chapter 2 Cumulative Test

1. C 2. G
 3. A 4. F
 5. A 6. H
 7. B 8. J
 9. D 10. G
 11. A 12. G
 13. B 14. F
 15. D 16. J
 17. D 18. G
 19. A 20. H

- | | |
|-------|-------|
| 21. B | 22. H |
| 23. B | 24. F |
| 25. B | 26. J |
| 27. A | 28. J |
| 29. D | 30. G |
| 31. D | 32. H |
| 33. A | 34. J |
| 35. D | 36. F |
| 37. C | 38. F |
| 39. C | 40. G |
| 41. B | 42. J |
| 43. D | 44. F |
| 45. C | 46. H |
| 47. B | 48. F |
| 49. A | 50. G |
| 51. B | 52. H |
| 53. D | 54. G |

CHAPTER 3

Section Quiz: Lessons 3-1 to 3-3

- | | |
|------|-------|
| 1. A | 2. J |
| 3. B | 4. J |
| 5. A | 6. F |
| 7. C | 8. H |
| 9. B | 10. F |

Section Quiz: Lessons 3-4 to 3-7

- | | |
|-------|-------|
| 1. A | 2. G |
| 3. D | 4. F |
| 5. C | 6. G |
| 7. C | 8. H |
| 9. A | 10. G |
| 11. D | 12. H |
| 13. A | |

Chapter 3 Test Form A

- | | |
|------|------|
| 1. A | 2. B |
| 3. B | 4. A |
| 5. B | 6. A |
| 7. C | 8. A |

- | | |
|-------|-------|
| 9. B | 10. A |
| 11. B | 12. A |
| 13. A | 14. B |
| 15. C | 16. A |
| 17. C | 18. B |
| 19. B | 20. A |
| 21. A | 22. A |
| 23. A | |

Chapter 3 Test Form B

- | | |
|-------|-------|
| 1. B | 2. G |
| 3. C | 4. F |
| 5. D | 6. F |
| 7. C | 8. H |
| 9. D | 10. G |
| 11. C | 12. G |
| 13. A | 14. H |
| 15. D | 16. J |
| 17. D | 18. J |
| 19. A | 20. G |
| 21. B | 22. H |
| 23. A | |

Chapter 3 Test Form C

- | | |
|-------|-------|
| 1. C | 2. J |
| 3. C | 4. H |
| 5. B | 6. F |
| 7. D | 8. F |
| 9. B | 10. H |
| 11. A | 12. G |
| 13. C | 14. J |
| 15. C | 16. F |
| 17. B | 18. H |
| 19. B | 20. G |
| 21. B | 22. H |
| 23. D | |