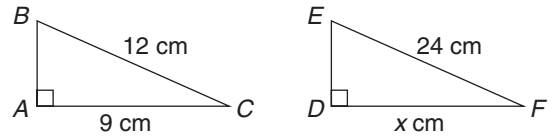


**CHAPTER**  
**2****Chapter Test**  
**Form A**

Select the best answer.

- Ann opened a bank account at the beginning of the year. She deposited the same amount once a month for 12 months. At the end of the 12 months, there was \$1,860 in the account. How much did she deposit each month?  
**A** \$77.50  
**B** \$155.00  
**C** \$186.00
- Solve  $4x + 17 = 8x + 5$ .  
**A**  $x = 3$   
**B**  $x = 5.5$
- Solve  $11x - 4 < 5x + 14$ .  
**A**  $x < \frac{1}{3}$   
**B**  $x < 3$   
**C**  $x > 3$
- Solve  $\frac{4}{5} = \frac{x}{35}$ .  
**A**  $x = 28$   
**B**  $x = 30$
- During a 17-game season, a football team scored 408 points. How many points per game did they score?  
**A** 2.4  
**B** 24  
**C** 6,936

6. Find
- $x$
- , the length of side
- $\overline{DF}$
- .



$$\triangle ABC \approx \triangle DEF$$

- A** 4.5 cm  
**B** 18 cm
- A line passes through  $(2, 8)$  and  $(4, 3)$ . What is the slope of the line?  
**A**  $-\frac{2}{5}$   
**B**  $-\frac{5}{2}$   
**C**  $\frac{5}{2}$
  - Which set of points could represent a linear function?  
**A**  $\{(1, 2), (2, 4), (3, 6), (4, 8)\}$   
**B**  $\{(1, 2), (2, 4), (3, 8), (4, 16)\}$
  - What is  $x + 2y = 10$  in slope-intercept form?  
**A**  $x = -2y - 10$   
**B**  $y = -\frac{1}{2}x + 5$   
**C**  $2y = -x + 10$
  - What is the  $y$ -intercept of the line  $2x + 3y = 12$ ?  
**A**  $y = 4$   
**B**  $y = 6$

## CHAPTER

## 2

## Chapter Test

## Form A continued

11. Which is the equation of the line that contains the points in the table?

<b>x</b>	1	3	6
<b>y</b>	3	7	13

- A**  $y = x + 2$   
**B**  $y = 2x + 1$   
**C**  $y = 3x - 2$
12. Which is the equation of the line parallel to  $y = 5x + 7$  with a  $y$ -intercept of 3?  
**A**  $y = 3x + 7$   
**B**  $y = 5x + 3$
13. Grapefruit costs \$3 per pound and oranges cost \$4 per pound. If a shopper buys  $x$  pounds of grapefruit and  $y$  pounds of oranges, which equation represents the pounds of grapefruit and oranges that can be bought for \$24?  
**A**  $x + y = 24$   
**B**  $4x + 3y = 24$   
**C**  $3x + 4y = 24$
14. If  $g(x)$  is a vertical translation 5 units down of  $f(x) = 4x + 3$ , what is the rule for  $g(x)$ ?  
**A**  $g(x) = -x + 3$   
**B**  $g(x) = 4x - 2$
15. If  $g(x)$  is a vertical stretch by a factor of 3 of  $f(x) = 3x + 1$ , what is the rule for  $g(x)$ ?  
**A**  $g(x) = 3x + 3$   
**B**  $g(x) = 9x + 1$   
**C**  $g(x) = 9x + 3$

16. Which best expresses the correlation among the data points below?

<b>x</b>	1	3	4	5	6
<b>y</b>	14	10	11	9	4

- A** positive  
**B** negative
17. Solve  $-5x \leq 10$  or  $3x + 2 < 14$ .  
**A**  $\{x \mid x < 4\}$   
**B**  $\{x \mid -2 \leq x < 4\}$   
**C** all real numbers
18. Solve  $|x| - 8 = 12$ .  
**A**  $x = -4$  or  $x = 20$   
**B**  $x = -20$  or  $x = 20$
19. Solve  $|2x - 3| \leq 13$ .  
**A**  $\{x \mid x \leq 8\}$   
**B**  $\{x \mid x \geq -5\}$   
**C**  $\{x \mid -5 \leq x \leq 8\}$
20. What is the vertex of  $f(x) = |x| + 6$ ?  
**A**  $(0, 6)$   
**B**  $(-6, 0)$
21. If  $g(x)$  is a reflection across the  $x$ -axis of  $f(x) = |x| + 3$ , what is the rule for  $g(x)$ ?  
**A**  $g(x) = -|x| + 3$   
**B**  $g(x) = 3 - |x|$   
**C**  $g(x) = -|x| - 3$

# **Answer Key** Algebra 2

---

## **CHAPTER 2**

---

### **Chapter Test Form A: Multiple Choice**

- |       |       |
|-------|-------|
| 1. B  | 12. B |
| 2. A  | 13. C |
| 3. B  | 14. B |
| 4. A  | 15. C |
| 5. B  | 16. B |
| 6. B  | 17. C |
| 7. B  | 18. B |
| 8. A  | 19. C |
| 9. B  | 20. A |
| 10. A | 21. C |
| 11. B |       |