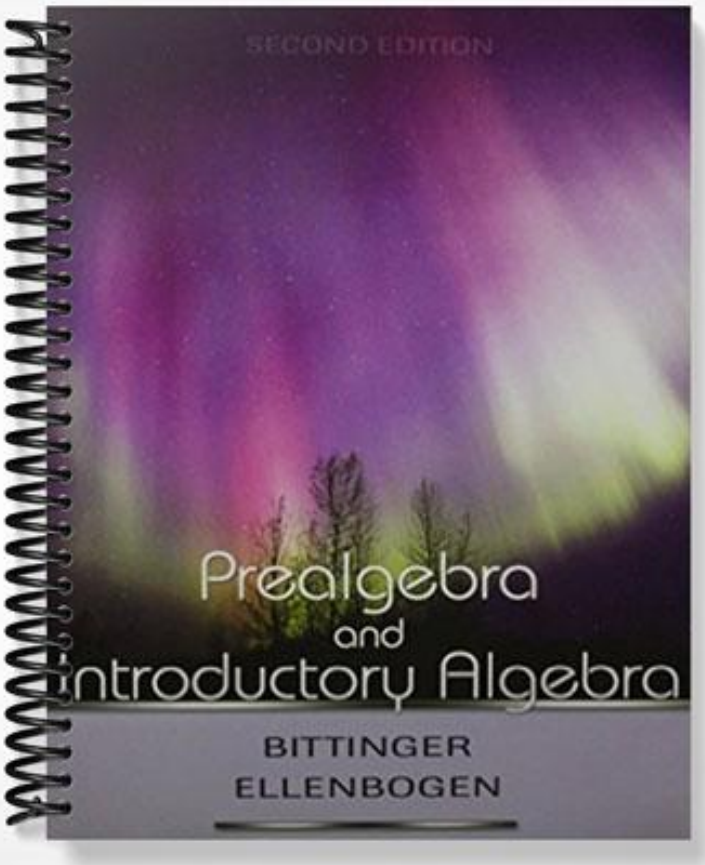
TEST BANK


SECOND EDITION
Prealgebra
and
Introductory Algebra
BITTINGER
ELLENBOGEN

**CHAPTER 2** **NAME**_____

**TEST FORM A** **CLASS_____SCORE_____GRADE_____**

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1. Tell which integers correspond to this situation: At 6 a.m. the temperature was five degrees below zero. At 3 p.m. the temperature was ten degrees above zero.

2. Use < or > for $\square$ to write a true sentence.

   $-23 \square -28$

3. Find the absolute value: $|-5|$.

4. Find $-(-x)$ when $x = -32$.

Compute and simplify.

5. $8 + (-17)$

6. $-4 + (-12)$

7. $-5 + 13$

8. $0 - 6$

9. $5 - 14$

10. $-3 - 27$

11. $-4 - (-15)$

12. $18 - (-6) - 7 + 3$

13. $(-4)^3$

14. $15(-6)$

15. $-8 \cdot 0$

16. $-54 \div (-9)$

17. $-\frac{24}{8}$

18. $36 \div 4 \cdot 2 - 8^2$

19. $20 - (-6 + 4)^2$

**ANSWERS**

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**CHAPTER 2** **NAME**_____

**TEST FORM A**

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**ANSWERS**

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20. The lowest recorded temperature in Anchorage, Alaska is –34°F and the highest is 85°F. How much higher is the high temperature than the low temperature?

21. If the counter on Barry's VCR read 3 minutes, and he then rewound a video to a reading of –12, how many minutes were rewound?

22. Evaluate $\frac{x-y}{3}$ for $x=13$ and $y=-8$.

23. Use the distributive law to write an equivalent expression: $5(2x-3y+6)$.

24. Combine like terms: $8x-6-4x-12$.

Solve.

25. $-3x=15$

26. $a+5=-23$

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27. Evaluate $3x^{5x-2}$ for $x=2$.

28. Simplify: $8-2[x+3(2-5x)]+1$.

**CHAPTER 2** **NAME**_____

**TEST FORM B** **CLASS_____SCORE_____GRADE_____**

1. Tell which integers correspond to this situation: Benoit paid \$160 more for oil than expected in February and \$30 less than expected in March.

2. Use < or > for ☐ to write a true sentence.

$$-32 \square -23$$

3. Find the absolute value: $|-83|$.

4. Find $-(-x)$ when $x = -15$.

Compute and simplify.

5. $8 + (-5)$

6. $-3 + (-19)$

7. $-8 + 13$

8. $0 - 8$

9. $4 - 12$

10. $-6 - 21$

11. $-3 - (-73)$

12. $15 - (-6) - 8 + 4$

13. $(-5)^3$

14. $8(-12)$

15. $-9 \cdot 0$

16. $-35 \div (-7)$

17. $\dfrac{42}{-6}$

18. $56 \div 8 \cdot 2 - 6^2$

19. $45 - (5 - 3)^3$

**ANSWERS**

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**CHAPTER 2** **NAME**_____

**TEST FORM B**

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**ANSWERS**

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20. The lowest recorded temperature in Barrow, Alaska is –56°F and the lowest in Juneau, Alaska is –22°F. How much lower is the lowest temperature in Barrow than in Juneau?

21. The temperature was $8°$ at noon and later dropped $12°$ by midnight. What was the new temperature?

22. Evaluate $\frac{x+3y}{2}$ for $x=-5$ and $y=7$.

23. Use the distributive law to write an equivalent expression: $8(4x + 2y – 6)$.

24. Combine like terms: $2x-21-6x+5$.

Solve.

25. $-4x=-32$

26. $n+6=-14$

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27. Find two solutions of $3|x| – 6 = 18$.

28. Simplify: $24-6(5x-3)-(-x+2)$.

**CHAPTER 2** **NAME**_____

**ALTERNATE TEST FORM 1** **CLASS_____SCORE_____GRADE_____**

1. Tell which integers correspond to this situation: Dan won $5000 in a stock car race. He paid $200 to enter the race.

Use < or > for ☐ to write a true sentence.

2. $-9 \square -12$

3. $-8 \square -10$

Find the absolute value.

4. $|15|$

5. $|-6|$

6. Find $-x$ when $x = -36$.

7. Find $-(-y)$ when $y = 7$.

Compute and simplify.

8. $-12 + (-9)$

9. $14 + (-3)$

10. $-18 + 5$

11. $-10 + 10$

12. $-5 - 6$

13. $-6 - (-15)$

14. $3 - (-4)$

15. $8 - 20$

**ANSWERS**

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**CHAPTER 2** **NAME**_____

**ALTERNATE TEST FORM 1**

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**ANSWERS**

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Compute and simplify.

16. $-5 \cdot 0$ 17. $-9 \cdot (-6)$

18. $(-3)^4$ 19. $48 \div (-8)$

20. $\dfrac{-120}{5}$ 21. $32 \div 8 \cdot (-2) - 5^2$

22. Evaluate $4x - 9y$ for $x = -4$ and $y = 3$.

23. Use the distributive law to write an equivalent expression: $-2(x - 7y + 8)$.

24. Combine like terms: $-3a + 4 - 5a - 6$.

25. Find the perimeter of a 11-in. by 14-in. sheet of paper.

Solve.

26. $-3m = -18$ 27. $y - 6 = 54$

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28. Simplify: $5 - 6[3x + 2(2 - x)] + 3x$.

**CHAPTER 2** **NAME**_____

**ALTERNATE TEST FORM 2** **CLASS_____SCORE_____GRADE_____**

1. Tell which integers correspond to this situation: Portia earned \$72 in tips on Friday. She owes her sister \$100.

Use < or > for ☐ to write a true sentence.

2. $-6 \square -9$ 3. $3 \square -11$

Find the absolute value.

4. $|18|$ 5. $|-2|$

6. Find $-y$ when $y = -4$.

7. Find $-(-x)$ when $x = -20$.

Compute and simplify.

8. –5 + (–10) 9. 15 + (–6)

10. –2 + 2 11. –18 + 7

12. –8 – 8 13. –12 – (–11)

14. 6 – (–14) 15. 2 – 7

**ANSWERS**

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**CHAPTER 2** **NAME**_____

**ALTERNATE TEST FORM 2**

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Compute and simplify.

16. $-13 \cdot 0$

17. $-9 \cdot (-5)$

18. $(-3)^3$

19. $-56 \div 8$

20. $\dfrac{112}{-4}$

21. $30 \div 2 \cdot (-3) - 6^2$

22. Evaluate $3x - 8y$ for $x = -6$ and $y = -3$.

23. Use the distributive law to write an equivalent expression: $4(6x - y - 12)$.

24. Combine like terms: $-3x + 4 - 7x - 15$.

25. Find the perimeter of a rectangular box that is 5 ft by 10 ft.

Solve.

26. $-3m = 36$

27. $-19 + n = 23$

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28. Find two solutions of: $4|x| + 16 = 100$.

**CHAPTER 2** **NAME**_____

**MULTIPLE CHOICE TEST FORM A** **CLASS_____SCORE_____GRADE_____**

1. Find the absolute value: $|-5|$.

   a) $-\frac{1}{5}$ b) $\frac{1}{5}$ c) 5 d) –5

2. Find $-(-x)$ when $x = -26$.

   a) –26 b) 26 c) $\frac{1}{26}$ d) $-\frac{1}{26}$

3. Add: $18 + (-50)$.

   a) –68 b) –32 c) –900 d) –28

4. Add: $-4 + (-16)$.

   a) 64 b) –12 c) 20 d) –20

5. Subtract: 5 – 13.

   a) 8 b) –8 c) –7 d) –18

6. Subtract: –8 – (–9).

   a) 1 b) 17 c) –1 d) –17

7. Simplify: $23 - (-5) - 5 + 6$.

   a) 17 b) 29 c) –114 d) –4

8. Multiply: –4(12).

   a) 8 b) –8 c) –48 d) 48

9. Multiply: $-18 \cdot 0$.

   a) –18 b) 1 c) 18 d) 0

10. Divide: $-36 \div 9$.

    a) –4 b) 4 c) –27 d) –3

11. Divide: $\frac{60}{-12}$.

    a) –4 b) –5 c) 48 d) 5

12. Simplify: $(-2)^3$.

    a) –6 b) 8 c) 6 d) –8

**ANSWERS**

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**CHAPTER 2** **NAME**_____

**MULTIPLE CHOICE TEST FORM A**

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**ANSWERS**

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13. The foundation of the house is 12 ft below ground level and the roof is 25 ft above ground level. What was the height of the structure from foundation to rooftop?

a) 13 ft b) 37 ft c) 33ft d) 38 ft

14. Evaluate: $\frac{5x-3y}{2}$ for $x=-8$ and $y=-4$.

a) –26 b) –5 c) –14 d) 26

15. Use the distributive law to write an equivalent expression: $6(2x-13y-4)$.

a) $12x-78y-24$ b) $12x-78y+24$
c) $12x+78y-24$ d) $12x-78y-10$

16. Combine like terms: $8x-2+21x-6$.

a) $29x+12$ b) $29x-4$ c) $29x+4$ d) $29x-8$

17. Simplify: $42\div 6\cdot 2-5^2$.

a) 4 b) –11 c) 81 d) $-\frac{43}{2}$

18. Solve: $-3+y=18$.

a) 21 b) 15 c) –6 d) –54

19. Solve: $-9m=-72$.

a) –63 b) –8 c) 8 d) –81

20. Find the perimeter of a backyard that is 40 ft by 36 ft.

a) 76 ft b) 152 ft c) 1140 ft d) 38 ft

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21. Simplify: $(-1)^5\left|14-(-15+8)^2\right|-\left|3(-8)\right|$.

a) –11 b) –59 c) –87 d) 59

22. Simplify: $4(5x-6)+2(8-4x)$.

a) $12x-8$ b) $28x-8$ c) $16x+10$ d) $12x-40$

**CHAPTER 2** **NAME**_____

**MULTIPLE CHOICE TEST FORM B** **CLASS_____SCORE_____GRADE_____**

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1. Find the absolute value: 12.

   a) 12 b) –12 c) $\frac{1}{12}$ d) $-\frac{1}{12}$

2. Find $-(-x)$ when $x = -21$.

   a) 21 b) –21 c) $\frac{1}{21}$ d) $-\frac{1}{21}$

3. Add: 3 + (–11).

   a) –7 b) –33 c) –8 d) –14

4. Add: –8 + (–15).

   a) –23 b) –120 c) 120 d) –7

5. Subtract: 5 – 11.

   a) 6 b) –55 c) 16 d) –6

6. Subtract: –15 – (–4).

   a) –19 b) –11 c) –60 d) 19

7. Simplify: 12 – (–11) – 4 + 6.

   a) 3 b) 25 c) 13 d) 134

8. Multiply: –3(–16).

   a) –19 b) –48 c) 13 d) 48

9. Multiply: $-10 \cdot 0$.

   a) 0 b) –10 c) 10 d) –1

10. Divide: –45 ÷ 5.

    a) –40 b) 9 c) –9 d) 225

11. Divide: $\frac{-56}{7}$.

    a) 8 b) –49 c) –9 d) –8

12. Simplify: $(-3)^4$.

    a) –12 b) 81 c) 12 d) –81

**ANSWERS**

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**CHAPTER 2** **NAME**_____

**MULTIPLE CHOICE TEST FORM B**

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**ANSWERS**

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13. Josh owed $78 on his account. He mistakenly sent in a payment of $87. What is the balance on his account?

a) –$165, or $165 debt b) $9, or $9 credit

c) –$9, or $9 debt d) $11, or $11 credit

14. Evaluate: $\frac{5m}{-2n}$ for $m = 4$ and $n = -1$.

a) –10 b) –3 c) 10 d) 3

15. Use the distributive law to write an equivalent expression: $8(4x - 2y - 15)$.

a) $32x - 16y - 120$ b) $12x - 16y - 7$

c) $32x - 2y - 15$ d) $32x - 16y - 7$

16. Combine like terms: $3x + 12 - 17x - 11$.

a) $-14x - 23$ b) $-14x - 132$

c) $-51x + 1$ d) $-14x + 1$

17. Simplify: $36 \div 6 \cdot 2 - 4^2$.

a) –13 b) –4 c) 4 d) –5

18. Solve: $a - 6 = -25$.

a) –19 b) –31 c) –21 d) 150

19. Solve: $-4x = -24$.

a) 8 b) –6 c) 6 d) –20

20. Find the perimeter of a frame that is 11 in. by 14 in.

a) 25 in. b) 50 in. c) 154 in. d) 77 in.

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21. Simplify: $(-1)^3|-2-8| + (-6)^2$.

a) 46 b) –22 c) –2 d) 26

22. Simplify: $3(2x + 4) - 5(3x + 6)$.

a) $-9x - 18$ b) $-11x - 18$

c) $-9x + 42$ d) $-9x + 10$