

Answers

4.

-4	1	-10	3
-9	2	-3	0
5	-8	-1	-6
-2	-5	4	-7

5. Check students' work.

1.2 Puzzle Time

IN CASE HE GOT A HOLE IN ONE

1.3 Start Thinking!

For use before Activity 1.3

Sample answer: You could find the distance from where you are starting to where you are going. You could find the change in elevation.

1.3 Warm Up

For use before Activity 1.3

1. 34 2. 64 3. 77
4. 7 5. 45 6. 2

1.3 Start Thinking!

For use before Lesson 1.3

Sample answer: Rewrite the problem as an addition problem (add the opposite), then use additional rules. Do this for all 3 questions.

1.3 Warm Up

For use before Lesson 1.3

1. -3 2. 15 3. 1
4. -10 5. -7 6. -17

1.3 Practice A

1. -5 2. 9 3. -10 4. -3
5. 19 6. 8 7. -22 8. 8
9. 2 10. 22 11. 30 12. -45
13. -13 14. $7 + (-3)$ 15. $5 - 3$
16. 2 17. 13 18. -4 19. 14
20. -1 21. 0 22. -18 23. 19
24. 26 25. 10 26. -11 27. -4

28. *Sample answer:* $x = -1$, $y = -3$; $x = -4$, $y = -6$

29. a. 367 ft b. 33 ft c. New Orleans

1.3 Practice B

1. -5 2. 29 3. -49 4. -15
5. 191 6. -146 7. -12 8. 18
9. $8 - (-28)$ 10. 9
11. 17 12. 13 13. 134 14. -48
15. -44 16. -25 17. 103 18. 206
19. 71 20. 17 21. 23 22. 7
23. -38 24. -53
25. a. 94, 103, 114, 107, 84, 76, 64, 65, 75, 86, 105, 98
b. high of 99, low of -46 c. 145

26. For $|b| > |a|$ or a and b have different signs.

1.3 Enrichment and Extension

1. highest: 14; first dart: 7; second dart: -7
2. lowest: -14; first dart: -7; second dart: 7

3.

First Dart	7	6	5	4	3	2
Second Dart	3	2	1	0	-1	-2

First Dart	1	0	-1	-2	-3
Second Dart	-3	-4	-5	-6	-7

4.

First Dart	1	0	-1	-2	-3
Second Dart	7	6	5	4	3

First Dart	-4	-5	-6	-7
Second Dart	2	1	0	-1

5. There are 15 ways to get a score of 0. There is 1 way to get a score of 14. There is 1 way to get a score of -14.
6. You should try to land on a negative integer first and a positive integer second. Subtracting a positive integer is the same as adding a negative integer, which gives you a lower score.

Answers

7. *Sample answer:* Students may use a strategy such as aiming over 7 for the first drop and over -7 for the second drop, or if they notice their paper punches always fall in some direction, they might try to get the pieces to fall over values that will give them positive points.

1.3 Puzzle Time

NOTHING IT JUST WAVED

1.4 Start Thinking!

For use before Activity 1.4

Sample answer: A deposit is adding a positive amount of money to your account. A withdrawal is adding a negative amount to your account.

1.4 Warm Up

For use before Activity 1.4

1. 18 2. -14 3. -9
4. 15 5. 24 6. -16

1.4 Start Thinking!

For use before Lesson 1.4

Sample answer: A problem like $2(4)$ means to add 2 groups of 4.

1.4 Warm Up

For use before Lesson 1.4

1. 14 2. -63 3. -48
4. 80 5. -30 6. 60

1.4 Practice A

1. -12 2. -30 3. 16 4. 54
5. 0 6. 36 7. 77 8. -25
9. -91 10. -9 11. -24 12. 81
13. -35 14. -30 15. -20 16. -42
17. 0 18. 48 19. 100 20. 9
21. -9 22. -8 23. -25 24. -48
25. 98 26. -18 27. 22 28. -7
29. 96, -192 30. 729, -2187

31. a. -12 ft

b.

Time	3 sec	6 sec	9 sec
Height	144 ft	108 ft	72 ft

c. 15 sec d. -48 ft

1.4 Practice B

1. 96 2. -140 3. -84 4. 120
5. -384 6. 220 7. -270 8. 0
9. -156 10. 96 11. -729 12. 144
13. -144 14. -343 15. 8 16. -72
17. 847 18. 18 19. -19 20. 24

21. a. \$325

b. Because $n = 0$ represents the 1st member, the 8th member pays \$25. So, the 9th member is free.

c. \$25, the 8th member

22. a. 47 b. yes; $-3, 16$ c. -49

1.4 Enrichment and Extension

1. 1575 2. 432 3. $-11,340$ 4. -2000

5.

$(-3)^2 = (-3)(-3)$	=	9
$(-3)^3 = (-3)(-3)(-3)$	=	-27
$(-3)^4 = (-3)(-3)(-3)(-3)$	=	81
$(-3)^5 = (-3)(-3)(-3)(-3)(-3)$	=	-243
$(-3)^6 = (-3)(-3)(-3)(-3)(-3)(-3)$	=	729
$(-3)^7 = (-3)(-3)(-3)(-3)(-3)(-3)(-3)$	=	-2187
$(-3)^8 = (-3)(-3)(-3)(-3)(-3)(-3)(-3)(-3)$	=	6561

6. The sign changes every time.

7. positive; The products are positive when the exponent is even.

8. negative; The products are negative when the exponent is odd.

1.4 Puzzle Time

DURING LEAP YEAR

1.5 Start Thinking!

For use before Activity 1.5

$+$ $\times$ $+$, $+$ $\times$ $-$, $-$ $\times$ $+$, $-$ $\times$ $-$

1.5 Warm Up

For use before Activity 1.5

1. -50 2. 30 3. -72
4. -105 5. 176 6. -128