

Lesson 1 Homework Practice

Integers and Absolute Value

Write an integer for each situation.

1. a profit of \$12 **12**

2. 1,440 feet below sea level **-1,440**

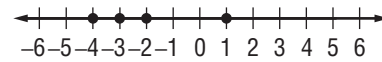
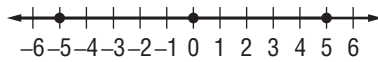
3. 22°F below zero **-22**

4. a gain of 31 yards **31**

Graph each set of integers on a number line.

5. $\{-5, 0, 5\}$

6. $\{-3, -2, 1, -4\}$



Evaluate each expression.

7. $|-11|$ **11**

8. $|-5| + 8$ **13**

9. $|-4| - |-4|$ **0**

10. $|12| \div 2 \times |-5|$ **30**

11. $|-4| + 7 - |3|$ **8**

12. $9 + |-6| \div |-3|$ **11**

13. **HEALTH** A veterinarian recommends that a St. Bernard lose weight. Write an integer to describe the dog losing 25 pounds. **-25**

14. **GEOGRAPHY** Mount Kilimanjaro is the highest peak in Africa. Write an integer to represent the elevation of Mount Kilimanjaro at 5,895 meters above sea level. **5,895**

15. **ECONOMY** Gasoline prices occasionally fluctuate during a two-month period of time. Prices increased 34 cents per gallon during the month of April and decreased 17 cents per gallon during the month of May. Which situation has the greater absolute value? Explain.
Increase of 34 cents because $|34| = 34$, $|-17| = 17$, and $34 > 17$.

Lesson 2 Homework Practice

Add Integers

Add.

1. $34 + 22$ **56**

2. $-29 + 30$ **1**

3. $9 + (-32)$ **-23**

4. $-16 + (-28)$ **-44**

5. $4 + (-50)$ **-46**

6. $-12 + (-63)$ **-75**

7. $-42 + 42$ **0**

8. $-28 + 14$ **-14**

9. $13 + 63$ **76**

10. $18 + (-12) + 5$ **11**

11. $-22 + (-10) + 15$ **-17**

12. $-14 + 0 + 13$ **-1**

Write an addition expression to describe each situation. Then find each sum and explain its meaning.

13. WEIGHT An actor gains 20 pounds for a part and then loses 15 pounds during the filming of the movie to go along with the story. **$20 + (-15)$ or 5 pounds; The actor is 5 pounds above his/her original weight.**

14. TEMPERATURE At 4:00 A.M., the outside temperature was -28°F . By 4:00 P.M. that same day, it rose 38 degrees. **$-28 + 38$ or 10 degrees; The temperature at 4:00 p.m. was 10°F .**

15. ROLLER COASTERS The latest thrill ride at a popular theme park takes roller coaster fans on an exciting ride. In the first 20 seconds, it carries its passengers up a 100-meter hill, plunges them down 72 meters, and quickly takes them back up a 48-meter rise. How much higher or lower from the start of the ride are they after these 20 seconds? **76 meters higher**

Lesson 3 Homework Practice

Subtract Integers

Subtract.

1. $16 - 14$ **2**

2. $-4 - 2$ **-6**

3. $9 - (-2)$ **11**

4. $-6 - (-8)$ **2**

5. $-20 - 10$ **-30**

6. $-28 - (-13)$ **-15**

7. $-33 - 33$ **-66**

8. $28 - 14$ **14**

9. $13 - (-63)$ **76**

10. $-18 - (-12)$ **-6**

11. $52 - (-30)$ **82**

12. $-15 - 0$ **-15**

13. **WEATHER** The highest and lowest recorded temperatures for the state of Texas are 120°F and -23°F . Find the difference in these extreme temperatures. **143°F**

ALGEBRA Evaluate each expression if $x = -8$, $y = 7$, and $z = -11$.

14. $x - 7$ **-15**

15. $-13 - y$ **-20**

16. $-11 - z$ **0**

17. $x - z$ **3**

18. $z - y$ **-18**

19. $y - x$ **15**

20. $x - (-z)$ **-19**

21. $|y - z|$ **18**

22. $x - z - y$ **-4**

23. **ANALYZE TABLES** In golf, scores are often stated as the number of strokes above or below par for the course. Four golfers played two rounds of golf during the weekend. The table lists their scores for each round in relation to par.

Golfer	Patrick	Diane	James	Judy
Round 1	-6	+1	+2	-3
Round 2	-2	-4	+7	+6

- Find the difference between James's Round 2 score and Diane's Round 2 score. **11**
- Find the difference between Patrick's lower score and Judy's higher score. **-12 or 12**

Lesson 5 Homework Practice

Divide Integers

Divide.

1. $42 \div (-7) = -6$

2. $45 \div (-5) = -9$

3. $-9 \div 3 = -3$

4. $-64 \div (-8) = 8$

5. $-39 \div (-13) = 3$

6. $-121 \div 11 = -11$

7. $\frac{-48}{12} = -4$

8. $\frac{-35}{7} = -5$

9. $\frac{-38}{-2} = 19$

10. $\frac{32}{-16} = -2$

11. $\frac{55}{-5} = -11$

12. $\frac{-63}{7} = -9$

13. Divide 75 by -25 . -3

14. Find the quotient of -30 and -15 . 2

ALGEBRA Evaluate each expression if $f = -15$, $g = 5$, and $h = -45$.

15. $-20 \div g = -4$

16. $90 \div h = -2$

17. $h \div f = 3$

18. $fg \div 25 = -3$

19. $\frac{f-h}{10} = 3$

20. $\frac{g-5}{-1} = 0$

21. $-f \div g = 3$

22. $\frac{h-3g}{f} = 4$

23. $\frac{f+h}{-g} = 12$

24. **ZOOLOGY** The table below shows the weight in pounds of large adult males in the cat family.

Cat	Cheetah	Cougar	Leopard	Lion	Tiger
Weight	143	227	200	550	400

a. What is the mean weight of these cats? **304 pounds**

b. What is the mean weight of the two largest cats? **475 pounds**