

LESSON

1.7

Multiplying *and* Dividing Integers

Review Vocabulary

mean, p. 39

BEFORE

You multiplied and divided decimals.

Now

You'll multiply and divide integers.

WHY?

So you can find the position of a submarine, as in Ex. 27.

$\left. \begin{array}{l} \text{pos} \\ \text{neg} \end{array} \right\} \times \begin{array}{l} \dot{\times} \\ \dot{\times} \\ \dot{\times} \end{array} \begin{array}{l} \text{pos} \rightarrow \text{pos} \\ \text{neg} \rightarrow \text{pos} \\ \text{neg} \rightarrow \text{neg} \end{array}$

$$80 - 5 = 40 - 15$$

$$C = \frac{.5(F - 32)}{\cancel{1}}$$

LESSON

1.7

Name _____ Date _____

Practice A

For use with pages 41-46

Tell whether the product or quotient is *positive* or *negative*. You do not need to find the product or quotient.

1. $-26(3)$

2. $-9(-12)$

3. $20(-11)$

4. $\frac{437}{-19}$

5. $\frac{-448}{-32}$

6. $-357 \div 21$

$$-26 \cdot 3 \rightarrow \text{neg}$$

$$20 \cdot -11 \rightarrow \text{neg}$$

$$\frac{-448}{-32} \rightarrow \text{pos}$$

$$\frac{\text{+}}{\text{+}}$$

Find the product or quotient.

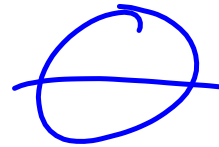
7. $-8(-13)$

$$-8 \cdot -13$$

$$104$$

8. $-10(17)$

9. $0(-59)$



10. $6(-15)$

$$6-15 \\ -90$$

11. $-12(5)$

$$126$$

12. $-9(-14)$

13. $75 \div (-3)$

$$\begin{array}{r} 75 \div -3 \\ -25 \end{array}$$

14. $0 \div (-47)$

15. $39 \div (-13)$

$$\begin{array}{r} 39 \div -13 \\ -3 \end{array}$$

16. $\frac{-126}{-9}$

17. $\frac{-84}{21}$

18. $\frac{120}{-24}$

$$- 81 \div 21$$

$$- 4$$

Simplify.

19. $9(-11)(-4)$

20. $-8(-12)(-3)$

21. $14(-20)(-7)$

$$\begin{array}{l} 9 \cdot 11 \cdot 4 \\ (-99 \cdot -4) \\ 396 \end{array}$$

$$\begin{array}{l} 14 \cdot 20 \cdot 7 \\ 280 \cdot 7 \\ 1950 \end{array}$$

22. $120 \div (-4) \div (-5)$

23. $-240 \div (-16) \div 5$

24. $90 \div (-3) \div 3$

$$\begin{aligned} & -240 \div -16 \div 5 \\ & 15 \div 5 \\ & 3 \end{aligned}$$

25. $-3(18) \div 6$

$$\begin{aligned} & -3 \cdot 18 \div 6 \\ & -54 \div 6 \end{aligned}$$

$$\begin{array}{r} -9 \\ \hline 120 \\ 15 \\ 15 \\ \hline 0 \end{array}$$

26. $-20(-15) \div 5$

27. $10(27) \div (-15)$

$$10 \cdot 27 \div 15$$

$$270 \div 15$$

$$-18$$

28. The table shows a town's average daily temperature each month for 1 year. Find the mean average daily temperature.

Month	Jan	Feb	Mar	Apr	May	Jun
Temperature	-15°F	-9°F	21°F	44°F	54°F	67°F
Month	Jul	Aug	Sep	Oct	Nov	Dec
Temperature	71°F	71°F	63°F	58°F	34°F	21°F

Handwritten notes in red ink:

$$\frac{\text{Sum}}{\#}$$

$$(-)$$

$$\boxed{} \div 12$$

- 29.** You have 25 shares of stock A, 10 shares of stock B, and 5 shares of stock C. In one day, the price per share changed by \$6 for stock A, $-\$7$ for stock B, and $-\$9$ for stock C. Find the total change in value of your stock.

Multiplying Integers

Words

The product of two integers with the same sign is positive.

The product of two integers with different signs is negative.

The product of any integer and 0 is 0.

Numbers

$$2(4) = 8 \quad -2(-4) = 8$$

$$2(-4) = -8 \quad -2(4) = -8$$

$$2(0) = 0 \quad -2(0) = 0$$

Dividing Integers

Words

The quotient of two integers with the same sign is positive.

The quotient of two integers with different signs is negative.

The quotient of 0 and any nonzero integer is 0.

Numbers

$$8 \div 4 = 2 \quad -8 \div (-4) = 2$$

$$-8 \div 4 = -2 \quad 8 \div (-4) = -2$$

$$0 \div 4 = 0 \quad 0 \div (-4) = 0$$