

LESSON

1-7

Review for Mastery

Multiplying and Dividing Integers

Since multiplication is a shortcut for addition, a pattern becomes apparent when you multiply or divide integers. Look at the two multiplication problems written as repeated addition.

$8 \times 3 = 8 + 8 + 8 = 24$		$-8 \times 3 = -8 + -8 + -8 = -24$	
$8 \times 3 = 24$		$-8 \times 3 = -24$	
$8 \times 2 = 16$	Notice the product	$-8 \times 2 = -16$	Notice the product
$8 \times 1 = 8$	is decreasing by 8.	$-8 \times 1 = -8$	is increasing by 8.
$8 \times 0 = 0$		$-8 \times 0 = 0$	
$8 \times -1 = -8$	Keep decreasing	$-8 \times -1 = 8$	Keep increasing by
$8 \times -2 = -16$	by 8 even though	$-8 \times -2 = 16$	8 even though both
$8 \times -3 = -24$	one factor is negative.	$-8 \times -3 = 24$	factors are negative.

Multiplication and division have the same rules for multiplying integers.

Positive \times Positive = Positive	Positive \times Negative = Negative
Negative \times Positive = Negative	Negative \times Negative = Positive

Tell if the signs are the same or different and if the result will be positive or negative.

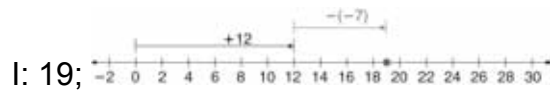
- | | |
|---|--|
| 1. $9 \times (-5)$
signs are _____
product is _____ | 2. $-14 \div (-2)$
signs are _____
quotient is _____ |
| 3. $27 \div 3$
signs are _____
quotient is _____ | 4. $50 \div (-2)$
signs are _____
quotient is _____ |

Enter + or - for the product or quotient.

- | | |
|--------------------------------|--------------------------------|
| 5. $(-14) \div (-2) =$ _____ 7 | 6. $8 \times 7 =$ _____ 56 |
| 7. $(-3) \times 5 =$ _____ 15 | 8. $16 \times (-3) =$ _____ 48 |
| 9. $25 \div (-5) =$ _____ 5 | 10. $(-100) \div 50 =$ _____ 2 |

Find the product or quotient.

- | | | |
|-----------------------------|-------------------------------|-----------------------------|
| 11. $7 \times (-2) =$ _____ | 12. $-99 \div (-11) =$ _____ | 13. $8 \times (-6) =$ _____ |
| 14. $64 \div 16 =$ _____ | 15. $-12 \times (-3) =$ _____ | 16. $-48 \div 12 =$ _____ |



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AT A PARKING METEOR

LESSON 1-7

Practice A

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|------------|-----------|
| 1. 6 | 2. 20 |
| 3. -4 | 4. 3 |
| 5. -5 | 6. -3 |
| 7. 2 | 8. 4 |
| 9. 48 | 10. -18 |
| 11. 21 | 12. -7 |
| 13. -16 | 14. 27 |
| 15. -3 | 16. -2 |
| 17. 24 | 18. -21 |
| 19. 3 | 20. -4 |
| 21. -20 | 22. -7 |
| 23. -12 | 24. 12 |
| 25. -14 | 26. 12 |
| 27. 4 | 28. 8 |
| 29. -18 | 30. -12 |
| 31. 28 | 32. -20 |
| 33. -\$520 | 34. 80 mi |

Practice B

- | | |
|---------|---------|
| 1. 42 | 2. -3 |
| 3. -21 | 4. -5 |
| 5. 9 | 6. 72 |
| 7. 8 | 8. -49 |
| 9. -40 | 10. 54 |
| 11. -9 | 12. -6 |
| 13. 27 | 14. -32 |
| 15. 6 | 16. -9 |
| 17. -50 | 18. 60 |
| 19. -36 | 20. 63 |
| 21. -60 | 22. 66 |
| 23. -60 | 24. 140 |

- | | |
|--------------|----------|
| 25. -66 | 26. 45 |
| 27. 80 | 28. 63 |
| 29. -80 | 30. -36 |
| 31. 45 | 32. -108 |
| 33. 3 slices | 34. -1°F |

Practice C

- | | |
|--|----------|
| 1. 42 | 2. -3 |
| 3. -21 | 4. -5 |
| 5. 54 | 6. -48 |
| 7. 12 | 8. -20 |
| 9. -65 | 10. 64 |
| 11. -7 | 12. -3 |
| 13. -160 | 14. 39 |
| 15. -225 | 16. -252 |
| 17. -180 | 18. 108 |
| 19. -121 | 20. -390 |
| 21. 200 | 22. 160 |
| 23. 250 | 24. -336 |
| 25. -29 | 26. -8 |
| 27. 7 | |
| 28. -72 ft per minute | |
| 29. A nonzero absolute value is always a positive number and the product of two positive numbers is always positive. | |

Review for Mastery

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|------------------------|--------|
| 1. different; negative | |
| 2. the same; positive | |
| 3. the same; positive | |
| 4. different; negative | |
| 5. + | 6. + |
| 7. - | 8. - |
| 9. - | 10. - |
| 11. -14 | 12. 9 |
| 13. -48 | 14. 4 |
| 15. 36 | 16. -4 |