

Lesson 1-8: Divide Integers

1. Sample answer: You can use a related multiplication fact to find the quotient in a division sentence. Then use the rules for dividing integers. If the integers have different signs, the quotient is negative. If the integers have the same sign, the quotient is positive.
2. Sample answer: Multiplication and division are related. A negative number multiplied by a positive number is a negative number. So a negative number divided by a negative number is a positive number.
3. Sample answer: The related division statement Helen wrote should be $0 \div -7 = 0$. Division by 0 is undefined.
4. a. - 6
b. 5
c. - 4
d. 10
e. - 5
f. - 4
5. - 3.5
6. C, D
7. - 16
- 4; - 16
- 4
8. -7; - 56
- 7; 8; - 56
9. Negative
10. No; - 6
11. a. $-780 \div 6$
b. - \$130
12. $\frac{-5}{-2}$; $\frac{10}{4}$; $\frac{-10}{-4}$; $\frac{5}{2}$
13. C
14. - 12
15. $-4 \div 0$ and $\frac{9}{0}$ are undefined.
16. A
17. - 55
18. $x = -8$
Sample answer:
 $\frac{396}{x-10} = -22$
 $396 = -22(x - 10)$
 $396 = -22x + 220$
 $396 - 220 = -22x$
 $176 = -22x$
 $176 \div -22 = x$
 $-8 = x$
19. A, C
20. A
21. - 1