

2-8**Study Guide and Intervention*****Dividing Integers***

The quotient of two integers with different signs is negative.

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

Example 1 Divide $30 \div (-5)$.

$30 \div (-5)$ The integers have different signs.

$30 \div (-5) = -6$ The quotient is negative.

Example 2 Divide $-100 \div (-5)$.

$-100 \div (-5)$ The integers have the same sign.

$-100 \div (-5) = 20$ The quotient is positive.

Exercises**Divide.**

1. $-12 \div 4$ **-3**

2. $-14 \div (-7)$ **2**

3. $\frac{18}{-2}$ **-9**

4. $-6 \div (-3)$ **2**

5. $-10 \div 10$ **-1**

6. $\frac{-80}{-20}$ **4**

7. $350 \div (-25)$ **-14**

8. $-420 \div (-3)$ **140**

9. $\frac{540}{45}$ **12**

10. $\frac{-256}{16}$ **-16**

ALGEBRA Evaluate each expression if $d = -24$, $e = -4$, and $f = 8$.

11. $12 \div e$ **-3**

12. $40 \div f$ **5**

13. $d \div 6$ **-4**

14. $d \div e$ **6**

15. $f \div e$ **-2**

16. $e^2 \div f$ **2**

17. $\frac{-d}{e}$ **-6**

18. $ef \div 2$ **-16**

19. $\frac{f^2}{e^2}$ **4**

20. $\frac{de}{f}$ **12**