

# Algebra II

## 1-6 Quotients

Definition of Division -  $x, y \in \mathbb{R} \quad y \neq 0$   
 $x \div y = x \left(\frac{1}{y}\right)$

Simplify. (pg 35)

1)  $-21 \div (-7)$   
 $3$

17)  $\frac{-24[-18 \div (-\frac{3}{2})]}{(-18)(-\frac{2}{3})}$   
 $\frac{-24[-18 \cdot \frac{2}{3}]}{12}$   
 $\frac{-24[27]}{12} = -2(27)$   
 $-54$

23)  $\frac{36c^2 - 24c - 6}{6} = 6c^2 - 4c - 1$

Evaluate each expression for the given values of the variable.

25)  $\frac{y(y-3)}{y-2}$

a)  $y = 1$

b)  $y = 4$

c)  $y = 3$

$$\frac{1(1-3)}{1-2} = \frac{-2}{-1} = 2$$

$$\frac{4(4-3)}{4-2} = \frac{4(1)}{2} = 2$$

$$\frac{3(3-3)}{3-2} = \frac{0}{1} = 0$$

pg 35  
2-28 even  
29,30