Find the LCM of 12, 18, 30

Method 1 - List Multiples

$12 \Rightarrow$ 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168, (180) 192 . . . . .

$18 \Rightarrow$ 18, 36, 54, 72, 90, 108, 126, 144, 162, (180,) . . . . .

$30 \Rightarrow$ 30, 60, 90, 120, 150, (180) . . . . .

Method 2 - Prime Factors.

$12 = (2 \cdot 2 \cdot 3)$ ← take all of these factors.
$18 = 2 \cdot 3 (3)$ ← take any I don't already have
$30 = 2 \cdot 3 \cdot (5)$ ← take any I don't already have

$LCM = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 = 180$

Find the LCM of 28, 42, 63

$28: 2 \cdot 2 \cdot 7$

$42: 2 \cdot 3 \cdot 7$

$63: 3 \cdot 3 \cdot 7$

$LCM = 2 \cdot 2 \cdot 7 \cdot 3 \cdot 3 = 252$

$$LCM = 252$$

HW/ p. 140 #3-5

Do p.140 - #6-14

3.1 cont'd...
GCF and LCM and Fractions.....

Simplifying Fractions

$$\frac{185}{325}$$

prime factorization and cancel.

$$\frac{185}{325} = \frac{\cancel{5} \cdot 37}{\cancel{5} \cdot 5 \cdot 13} = \frac{37}{5 \cdot 13} = \frac{37}{65}$$

i cancelled the GCF

$$\frac{340}{380} = \frac{\cancel{2} \cdot 2 \cdot \cancel{5} \cdot 17}{\cancel{2} \cdot 2 \cdot \cancel{5} \cdot 19} = \frac{17}{19}$$

LCM adding Fractions

common denominator

$$\frac{3}{4} + \frac{1}{6}$$

$$\frac{3}{4}\left(\frac{3}{3}\right) + \frac{1}{6}\left(\frac{2}{2}\right)$$

LCM

$4 = \boxed{2 \cdot 2}$

$6 = 2 \cdot \boxed{3}$

$LCM = 2 \cdot 2 \cdot 3 = 12$

$$\frac{9}{12} + \frac{2}{12}$$

$$\frac{11}{12}$$

p.140 - # 6-19 *

p. 140 - #15-19