Adding, Subtracting, Multiplying, and Dividing Rational Numbers

In problems 1-2, simplify the fraction

1. $\dfrac{24}{40}$	2. $\dfrac{-30}{48}$

In problems 3-5, multiply the fractions and simplify

3. $\dfrac{-10}{8}\cdot\dfrac{20}{25}$	4. $-6\cdot\dfrac{-14}{20}$	5. $\dfrac{12}{30}\cdot\dfrac{15}{20}$

In problems 6-7, find the reciprocal of each number

6. -8	7. $\dfrac{5}{3}$

In problems 8-10, divide the fractions and simplify

8. $\dfrac{-9}{22}\div\dfrac{15}{-8}$	9. $12\div\dfrac{9}{4}$	10. $\dfrac{25}{21}\div\dfrac{35}{49}$

In problems 11-15, find the sum or difference and simplify

11. $\dfrac{-8}{10}+\left(-\dfrac{7}{10}\right)$	12. $\dfrac{-2}{3}+\left(-\dfrac{1}{6}\right)$	13. $-\dfrac{4}{9}+\dfrac{7}{8}$
14. $\dfrac{2}{5}-4$	15. $\dfrac{8}{15}-\dfrac{3}{10}$	