Section 3.4 Multiplying Rational Numbers

1. Multiply the following. Keep your answers as a fraction in simplest form. No calculators:

a) $\dfrac{2}{5}\times\dfrac{15}{18}$	b) $\dfrac{4}{7}\times\dfrac{14}{24}$	c) $\dfrac{12}{28}\times\dfrac{42}{15}$	d) $\dfrac{12}{5}\times\dfrac{25}{6}$
e) $\dfrac{27}{8}\times\dfrac{24}{81}$	f) $\dfrac{25}{27}\times\dfrac{36}{45}$	g) $\dfrac{54}{56}\times\dfrac{18}{10}\times\dfrac{64}{81}$	h) $\dfrac{8}{21}\times\dfrac{18}{36}\times\dfrac{24}{27}$
i) 1.25×0.375	j) $1\dfrac{11}{16}\times0.\overline{888}$	k) $1\dfrac{3}{7}\times0.\overline{777}$	L) 0.64×0.25
m) 0.25×-0.60	n) $-0.8\overline{333}\times1.5$	o) $1.\overline{333}\times0.875$	p) 1.25×-3.2
q) $3.2\times\left(0.1\overline{666}\right)\times(2.5)$	r) $\dfrac{8}{15}\times\dfrac{27}{20}\times\dfrac{-15}{18}$	s) $1.23\times2.8\times1.2$	t) $0.026\times4\times5.2$

2. Determine the missing number in the box so that the expression will be true:

a) $\dfrac{3}{4} \times \boxed{} = \dfrac{5}{8}$	b) $2.40 \times \boxed{} = 1.\overline{333}$	c) $1.875 \times \boxed{} = 4.5$
d) $-3.25 \times \boxed{} = 15\dfrac{11}{40}$	e) $-0.045 \times \boxed{} = 0.18$	f) $6.75 \times \boxed{} = 5.25$

3. 5/9 of the students are passing in Science class and 3/5 of these students are getting A's. What fractions of all students are getting A's?

4. A plant grew $2\dfrac{5}{8}$ of an inch every day. How many inches will it grow in $12\dfrac{1}{3}$ days?

5. David ran $2\dfrac{1}{3}$ laps around a track in 1 hour. How many laps can he run in $3.75h$ if he maintained the same speed?

6. Challenge: Sharon has some money in her pocket. Her friend Wendy has $1\dfrac{1}{2}$ times as much as Sharon. Another friend Chelsea has $1\dfrac{2}{3}$ times as much money as Wendy. Altogether they have $200. How much money does Sharon have?