## **Section 3.4 Multiplying Rational Numbers**

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

a)	2	15
a,	5	18

b) 
$$\frac{4}{7} \times \frac{14}{24}$$

c) 
$$\frac{12}{28} \times \frac{42}{15}$$

d) 
$$\frac{12}{5} \times \frac{25}{6}$$

e) 
$$\frac{27}{8} \times \frac{24}{81}$$

f) 
$$\frac{25}{27} \times \frac{36}{45}$$

g) 
$$\frac{54}{56} \times \frac{18}{10} \times \frac{64}{81}$$

h) 
$$\frac{8}{21} \times \frac{18}{36} \times \frac{24}{27}$$

j) 
$$1\frac{11}{16} \times 0.\overline{888}$$

k) 
$$1\frac{3}{7} \times 0.\overline{777}$$

m) 
$$0.25 \times -0.60$$

n) 
$$-0.8\overline{333} \times 1.5$$

p) 
$$1.25 \times -3.2$$

$$\mathsf{q)}\,3.2\times\!\left(0.1\overline{666}\right)\!\times\!\left(2.5\right)$$

r) 
$$\frac{8}{15} \times \frac{27}{20} \times \frac{-15}{18}$$

s) 
$$1.23 \times 2.8 \times 1.2$$

t) 
$$0.026 \times 4 \times 5.2$$

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

a) $\frac{3}{4} \times  = \frac{5}{8}$	b) $2.40 \times  = 1.\overline{333}$	c) 1.875× = 4.5
d) $-3.25 \times \boxed{ = 15\frac{11}{40}}$	e) -0.045× = 0.18	f) 6.75× = 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  $2\frac{5}{8}$  of an inch every day. How many inches will it grow in  $12\frac{1}{3}$  days?
- 5. David ran  $2\frac{1}{3}$  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  $1\frac{1}{2}$  times as much as Sharon. Another friend Chelsea has  $1\frac{2}{3}$  times as much money as Wendy. Altogether they have \$200. How much money does Sharon have?