Name _____ Date _____

1. Convert. Show your work. Express your answer as a mixed number. The first one is done for you.

a. $2\frac{2}{3}$ yd = 8 ft

$2\frac{2}{3}$ yd $= 2\frac{2}{3} \times 1$ yd
$= 2\frac{2}{3} \times 3$ ft
$= \frac{8}{3} \times 3$ ft
$= \frac{24}{3}$ ft
$= 8$ ft

b. $1\frac{1}{4}$ ft = $\frac{5}{12}$ yd

$1\frac{1}{4}$ ft $= 1\frac{1}{4} \times 1$ ft
$= 1\frac{1}{4} \times \frac{1}{3}$ yd
$= \frac{5}{4} \times \frac{1}{3}$ yd
$= \frac{5}{12}$ yd

c. $3\frac{5}{6}$ ft = 46 in

$3\frac{5}{6}$ ft $= 3\frac{5}{6} \times 1$ ft
$= \frac{23}{6} \times 12$ in
$= \frac{23 \times 12^{2}}{1\ 6}$ in
$= 46$ in

d. $7\frac{1}{2}$ pt = $3\frac{3}{4}$ qt

$7\frac{1}{2}$ pt $= 7\frac{1}{2} \times 1$ pt
$= \frac{15}{2} \times \frac{1}{2}$ qt
$= \frac{15}{4}$ qt
$= 3\frac{3}{4}$ qt

e. $4\frac{3}{10}$ hr = 258 min

$4\frac{3}{10}$ hr $= 4\frac{3}{10} \times 1$ hr
$= \frac{43}{10} \times 60$ min
$= \frac{43 \times 60^{6}}{1\ 10}$ min
$= 258$ min

f. 33 months = $2\frac{9}{12}$ years $= 2\frac{3}{4}$ years

33 mo. $= 33 \times 1$ mo
$= 33 \times \frac{1}{12}$ yr
$= \frac{33}{12}$ yr
$= 2\frac{9}{12}$ yr
$= 2\frac{3}{4}$ yr

2. Four members of a track team run a relay race in 165 seconds. How many minutes did it take them to run the race?

165 seconds = ___ minutes

165 sec = 165 x 1 sec

= 165 x $\frac{1}{60}$ min

= $\frac{165}{60}$ min

= 2 $\frac{45}{60}$ min

$2\frac{45}{60}$ min = $2\frac{3}{4}$ min

3. Horace buys $2\frac{3}{4}$ lb of blueberries for a pie. He needs 48 oz of blueberries for the pie. How many more pounds of blueberries does he need to buy?

$2\frac{3}{4}$ lb = ___ oz

$2\frac{3}{4}$ lb = $2\frac{3}{4}$ x 1 lb

= $\frac{11}{4}$ x 16 oz

= $\frac{11 \times \cancel{16}^{4}}{\cancel{4}_{1}}$ oz

= 44 oz

48 − 44 = 4

He needs to buy 4 more ounces, which is $\frac{4}{16}$ pound.

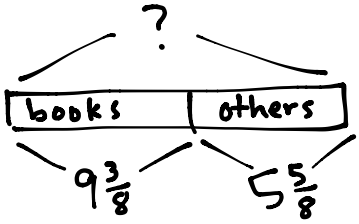
$\frac{4}{16} = \frac{1}{4}$ pound

4. Tiffany is sending a package that may not exceed 16 lb. The package contains books that weigh a total of $9\frac{3}{8}$ lb. The other items to be sent weigh $\frac{3}{5}$ the weight of the books. Will Tiffany be able to send the package?

$\frac{3}{5} \times 9\frac{3}{8} = \frac{3}{\cancel{5}_{1}} \times \frac{\cancel{75}^{15}}{8}$

= $\frac{45}{8}$

= $5\frac{5}{8}$



$9\frac{3}{8} + 5\frac{5}{8} = 14\frac{8}{8}$

= 15 pounds

Yes, Tiffany will be able to send the package.