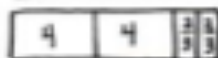
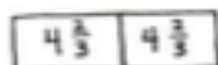


Name Jack Date _____

1. Draw tape diagrams to show two ways to represent 2 units of
- $4\frac{2}{3}$
- .



Write a multiplication expression to match each tape diagram.

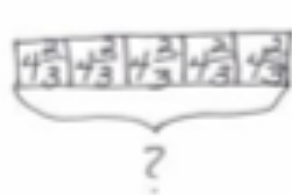
$$2 \times 4\frac{2}{3} \qquad (2 \times 4) + (2 \times \frac{2}{3})$$

2. Solve the following using the distributive property. The first one has been done for you. (As soon as you are ready, you may omit the step that is in line 2.)

<p>a. $3 \times 6\frac{2}{5} = 3 \times (6 + \frac{2}{5})$ $= (3 \times 6) + (3 \times \frac{2}{5})$ $= 18 + \frac{12}{5}$ $= 18 + 2\frac{2}{5}$ $= 20\frac{2}{5}$</p>	<p>b. $2 \times 4\frac{2}{3} = 2(4 + \frac{2}{3})$ $= (2 \times 4) + (2 \times \frac{2}{3})$ $= 8 + \frac{4}{3}$ $= 8 + 1\frac{1}{3}$ $= 9\frac{1}{3}$</p>
<p>c. $3 \times 2\frac{5}{8} = 3 \times (2 + \frac{5}{8})$ $= 6 + \frac{15}{8}$ $= 6 + 1\frac{7}{8}$ $= 7\frac{7}{8}$</p>	<p>d. $2 \times 4\frac{2}{10} = 2 \times (4 + \frac{2}{10})$ $= 8 + \frac{4}{10}$ $= 8 + 1\frac{4}{10}$ $= 9\frac{4}{10}$</p>

$\begin{aligned} \text{e. } 3 \times 7\frac{3}{4} &= 3 \times (7 + \frac{3}{4}) \\ &= 21 + \frac{9}{4} \\ &= 21 + 2\frac{1}{4} \\ &= 23\frac{1}{4} \end{aligned}$	$\begin{aligned} \text{f. } 6 \times 3\frac{1}{2} &= 6 \times (3 + \frac{1}{2}) \\ &= 18 + \frac{6}{2} \\ &= 18 + 3 \\ &= 21 \end{aligned}$
$\begin{aligned} \text{g. } 4 \times 9\frac{1}{5} &= 4 \times (9 + \frac{1}{5}) \\ &= 36 + \frac{4}{5} \\ &= 36\frac{4}{5} \end{aligned}$	$\begin{aligned} \text{h. } 5\frac{3}{8} \times 4 &= 4 \times (5 + \frac{6}{8}) \\ &= 20 + \frac{24}{8} \\ &= 20 + 3 \\ &= 23 \end{aligned}$

3. For one dance costume, Saisha needs $4\frac{2}{3}$ feet of ribbon. How much ribbon does she need for 5 identical costumes?



$$\begin{aligned} 4\frac{2}{3} \times 5 &= 5 \times (4 + \frac{2}{3}) \\ &= 20 + \frac{10}{3} \\ &= 20 + 3\frac{1}{3} \\ &= 23\frac{1}{3} \end{aligned}$$

Saisha needs $23\frac{1}{3}$ feet of ribbon.