

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Solve using a tape diagram.

a.  $\frac{1}{4}$  of 24 = 6

4 units = 24  
1 unit =  $24 \div 4$   
= 6

b.  $\frac{1}{4}$  of 48 = 12

4 units = 48  
1 unit =  $48 \div 4$   
= 12

c.  $\frac{2}{3} \times 18 = 12$

3 units = 18  
1 unit =  $18 \div 3$   
= 6

d.  $\frac{2}{6} \times 18 = 6$

6 units = 18  
1 unit =  $18 \div 6$   
= 3

e.  $\frac{3}{7} \times 49 = 21$

7 units = 49  
1 unit =  $49 \div 7$   
= 7

f.  $\frac{3}{10} \times 120 = 36$

10 units = 120  
1 unit =  $120 \div 10$   
= 12

g.  $\frac{1}{3} \times 31 = 10\frac{1}{3}$

3 units = 31  
1 unit =  $31 \div 3$   
=  $10\frac{1}{3}$

h.  $\frac{2}{5} \times 20 = 8$

5 units = 20  
1 unit =  $20 \div 5$   
= 4

i.  $\frac{1}{4} \times 25 = 6\frac{1}{4}$

4 units = 25  
1 unit =  $25 \div 4$   
=  $6\frac{1}{4}$

j.  $\frac{3}{4} \times 25 = 18\frac{3}{4}$

4 units = 25  
1 unit =  $25 \div 4$   
=  $6\frac{1}{4}$

3 units =  $18\frac{3}{4}$

k.  $\frac{3}{4}$  of a number is 27. What's the number?

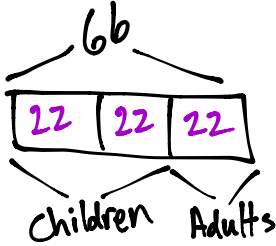
3 units = 27  
1 unit = 9  
? = 36

l.  $\frac{2}{5}$  of a number is 14. What's the number?

2 units = 14  
1 unit = 7  
? = 35

2. Solve using tape diagrams.

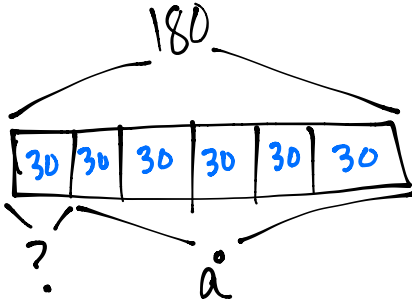
- a. A skating rink sold 66 tickets. Of these,  $\frac{2}{3}$  were children's tickets, and the rest were adult tickets. How many adult tickets were sold?



3 units = 66  
1 unit = 22

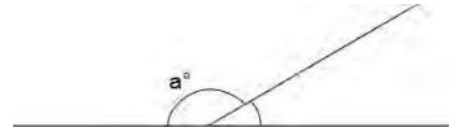
22 adult tickets were sold.

- b. A straight angle is split into two smaller angles as shown. The smaller angle's measure is  $\frac{1}{6}$  that of a straight angle. What is the value of angle a?

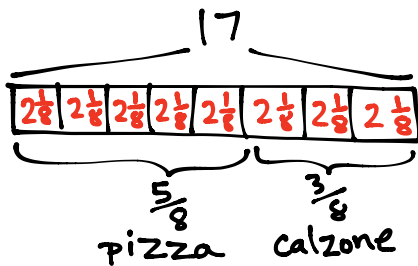


6 units = 180  
1 unit = 30  
 $5 \times 30 = 150$

Angle A is 150°



- c. Annabel and Eric made 17 ounces of pizza dough. They used  $\frac{5}{8}$  of the dough to make a pizza and used the rest to make calzones. What is the difference between the amount of dough they used to make pizza and the amount of dough they used to make calzones?



1 unit =  $17 \div 8$

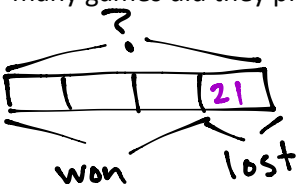
$8 \overline{) 17} \begin{array}{r} 2\frac{1}{8} \\ -16 \\ \hline 1 \end{array}$

$4\frac{2}{8} = 4\frac{1}{4}$  ounces

pizza:  $5 \times 2\frac{1}{8} = 10\frac{5}{8}$   
calzone:  $3 \times 2\frac{1}{8} = 6\frac{3}{8}$

$4\frac{2}{8}$  ounces more dough for pizza.

- d. The New York Rangers hockey team won  $\frac{3}{4}$  of their games last season. If they lost 21 games, how many games did they play in the entire season?



1 unit = 21  
4 units =  $21 \times 4 = 84$

84 games